Farmers’ Guide to Solar and Wind Energy in Minnesota

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These materials are intended to provide general legal information. Farmers with specific questions should consult an attorney for advice regarding their particular situation.
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I. Introduction

In 2017, Minnesota ranked seventh in the nation for wind power generation and sixth in the nation for solar power generation. With the potential for further growth in this sector, many farmers across rural Minnesota are considering whether alternative energy production could be a viable addition to their farming operations.

Deciding whether to engage in renewable energy production raises many preliminary questions. For example, is wind or solar energy production appropriate for the farmer’s land, resources, and lifestyle? Does the farmer want a small wind turbine or solar system for on-farm energy use? Or, does the farmer wish to work with a developer to engage in a larger wind or solar energy project?

Once the farmer has answered these initial questions, a host of additional considerations arise relating to contracts, leases, installation, liability, tax repercussions, and more. This resource aims to help farmers as they begin to navigate and think through these additional considerations. While this Guide will not walk farmers through the process of deciding which renewable energy resource to invest in, it is intended to provide baseline information for farmers who are thinking about entering into renewable energy agreements. Because of the narrow scope of this Guide, it assumes the farmer is also the landowner.

Although there are a variety of renewable energy sources that a farmer may want to consider, this Guide is limited to discussing wind and solar energy exclusively. While these two forms of renewable energy differ greatly in terms of their structure and utility for a farmer’s land, the questions and considerations with which farmers should approach signing an energy agreement—whether for solar or wind—share many similarities. This resource will address many of those considerations.

When reading this Guide, farmers should keep in mind that they have the ability to negotiate with developers before signing any agreement. If a provision of a contract is concerning to a farmer, that farmer should absolutely negotiate the contract before signing the agreement and becoming bound by its terms.

This resource, however, should not be read as a substitute for seeking legal advice if a farmer has questions related to a specific renewable energy contract or project. Consulting with an attorney who specializes in the relevant area of law (contract, renewable energy, tax law, etc.) is always recommended.

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3 For more detailed information on deciding which type of renewable energy system might be best for a farmer, see CATHY SVEJKOVSKY, ATTRA, Renewable Energy Opportunities for the Farm (2006), available at: https://attra.ncat.org/attra-pub-summaries/?pub=306.
II. Current Minnesota Law

Minnesota has a variety of laws aimed at promoting alternative sources of energy such as wind and solar. Under one such law, Minnesota's renewable energy standard, the state’s utilities are required to make a good faith effort to obtain electricity for their customers from renewable energy sources. This standard requires that 20 percent of the retail electric sales of the state’s electric utility companies come from a renewable energy source, such as wind or solar, by 2020, increasing to 25 percent by 2025. The law subjects Xcel Energy—the state’s largest utility—to a higher standard of 30 percent of total retail electric sales from renewable sources by 2020.

Over and above these general renewable energy standards, all of Minnesota’s utilities must meet an additional carve-out for solar energy, which requires that at least 1.5 percent of all retail electric sales come from solar energy by 2020. By 2030, Minnesota has a goal of having 10 percent of all retail electric sales be generated by solar energy.

The 2013 law that created the solar carve-out also established a framework for promoting community solar gardens in Minnesota. Community solar gardens allow consumers to purchase subscriptions to a central solar facility—often owned by utility companies or independent developers—and to receive a credit on their electric bills for the energy that their share in the solar garden produces.

Minnesota’s renewable energy standard and goals apply directly to the state’s power-generating companies, including its public utilities, generation and transmission cooperatives, municipal power agencies, and power districts. Indirectly, however, the standards also affect the state’s municipal electric utilities and rural electric distribution cooperatives, because the energy they purchase and sell to their customers must also meet the state’s standards.

Currently, Minnesota’s utilities appear on-track to meet the renewable energy standard goals. In 2017, renewable energy sources provided 25 percent of Minnesota’s overall electricity generation, with wind energy being the largest renewable energy resource. The State Legislature also began an effort in 2017 to increase the general renewable energy standard goal

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4 MINN. STAT. § 216B.1691, subd. 2 (2019).
5 MINN. STAT. § 216B.1691, subd. 2a (2019). Other potential sources of renewable energy, or “eligible energy technologies” as Minnesota’s statute refers to them, include hydroelectric power, hydrogen, and biomass. MINN. STAT. § 216B.1691 subd. 1(a) (2019).
6 MINN. STAT. § 216B.1691, subd. 2a(b) (2019).
7 MINN. STAT. § 216B.1691, subd. 2f(a) (2019).
8 MINN. STAT. § 216B.1691, subd. 2f(e) (2019).
11 MINN. STAT. § 216B.1691, subd. 1(b) (2019).
14 This 25 percent figure refers to energy generation, as opposed to energy sales which are the measure of Minnesota’s renewable energy standard goals.
to require that 50 percent of all retail electric sales come from renewable sources by 2030. To date, this goal has not become law.

III. Working with Developers

One common way for a farmer to participate in renewable energy production is by working with a developer who wishes to install wind turbines or solar panels on the farmer’s land. In such a situation, the farmer will likely be asked to sign one or more agreements with the developer.

A. Types of Legal Agreements

A farmer who has well-situated land for a wind or solar energy project may have a variety of options when it comes to working with an energy developer. For example, the farmer could choose to sell or lease the land to the developer, or the farmer could grant the developer an easement to their land.

Below are a few of the most common ways that a farmer can convey an interest in their land to an energy developer.

1. Easements

One of the more common types of agreements that a farmer and a developer will enter into is called an easement. An easement is an agreement that allows a party to use a farmer’s land for a specified purpose. In other words, easements convey limited rights to use a portion of the farmer’s property rights, which can include rights to land and air. For example, an easement might grant a developer the right to install and maintain a solar or wind project on the farmer’s land. Easements can be stand-alone agreements, or they can be included in a larger contract between a farmer and a developer.

The duration of an easement can be limited to a set length of time, or it can be perpetual, meaning that the easement will remain in effect for as long as the allowed use continues, even if the landowner dies or chooses to transfer or sell the land. Perpetual easements can therefore bind future owners of the land, even if those individuals played no role in forming the original agreement.

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16 The effort to increase the general renewable energy standard goal was initiated in 2017 by the office of then-Lieutenant Governor Tina Smith. See https://www.albertleatribune.com/2017/02/lieutenant-governor-announces-renewable-energy-goal-in-albert-lea/.
Easements can also be exclusive or non-exclusive. A non-exclusive easement permits the developer to allow another company or party to use the land for a different purpose, while an exclusive easement limits the use of the easement to only the developer (as the holder of the easement). A farmer considering granting an easement to an energy developer will need to know whether the easement is exclusive or non-exclusive, and if anyone else might be permitted to enter the farmer’s property and use the easement at some later point.

Under Minnesota law, wind and solar easements are specifically defined as “rights” that a farmer has—as a property owner—which may be granted to another in order to ensure that a wind power system or solar energy system has adequate exposure to the wind or sun, respectively. For example, a farmer might grant a developer an easement for the open and unobstructed access to the sun or wind.

In Minnesota, wind and solar easements must be in writing, and must be filed and recorded in the office of the recorder for the county in which the easement is granted. Unless the agreement states otherwise, Minnesota law presumes that the easement is perpetual and will last forever. Accordingly, if a farmer wants to restrict the term of a wind or solar easement, its duration must be expressly limited within the written agreement itself.

Minnesota law also outlines specific requirements for the contents of a wind or solar easement. For example, a wind or solar easement must include a description of the real property affected, the terms under which the easement is granted or may be terminated, and any provisions relating to compensation for the farmer. In addition, a wind easement must describe both the vertical and horizontal angles (in degrees) and the distances from the wind power system for which an obstruction of the wind is prohibited. Solar easements must include a description of either the vertical and horizontal angles—measured from the site of the solar energy system—or the place and time of day in which an obstruction to direct sunlight is prohibited or limited.

As with most aspects of energy agreements, a farmer who is granting a wind or solar easement to a developer should carefully consider how the terms of that easement might impact their own goals for the land. For example, if a farmer grants an

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21 MINN. STAT. § 500.30, subds. 1, 1a.
22 MINN. STAT. § 500.30, subd. 2.
23 Until June 1, 2017, Minnesota law placed a seven-year limitation on wind easements, which provided that if a wind project did not begin commercial operation within seven years from the time the easement or lease was entered into, the easement or lease would automatically terminate. See MINN. STAT. § 500.30, subd. 2 (2012). Accordingly, while some existing wind agreements could still be operating under this seven-year limitation, any new agreements between farmers and developers will by default be presumed to be perpetual.
24 MINN. STAT. § 500.30.
25 MINN. STAT. § 500.30, subd. 3(a), (d), (e).
26 MINN. STAT. § 500.30, subd. 3(c).
27 MINN. STAT. § 500.30, subd. 3(b).
easement that provides the developer with “exclusive” access to the wind or sun (or any such similar language), the easement could prevent the farmer from later adding a personal distributed generation (DG) system on the land. However, it can be complicated to accurately and unambiguously draft language that reserves some rights for the farmer to later access and generate personal revenue from wind or solar energy systems. Farmers are therefore advised to consult with an attorney before agreeing to language that purports to divide access to wind or solar energy between the developer and the farmer.

2. Leases

A lease is another common agreement farmers can enter into with developers. A lease transfers the right to possess property for a specific period of time from the farmer (as the landlord) to another party (the tenant). A lease will contain various conditions which outline or restrict the ability of the tenant to use the property. Unlike a sale, a lease transfers only the right to possess the property and only for a discrete period of time. And unlike an easement, a lease typically transfers to the tenant the exclusive right to possess the property for the duration of the agreement.

For this reason, farmers will want to think about their desired use of the land (farming, recreation, ability to use access roads, etc.), and may want to consider reserving certain rights under the lease in order to retain access to portions of the leased land.

For wind and solar projects, developers will likely seek a long-term lease of the land on which the project will be built. These leases typically last for decades.

3. Right of First Refusal

A farmer might also choose to sell the developer what is known as a right of first refusal over the land. A right of first refusal gives the developer the ability to match the terms of a proposed sale or lease to another third party in the future. With a right of first refusal, there is no requirement or guarantee that a developer will exercise its right to purchase or lease the land. Nonetheless, the farmer is required to communicate to that developer any subsequent offers to purchase or lease the property that the farmer may receive. Other terms of the right of first refusal can be negotiated in the agreement.

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Unlike an option to purchase or lease, which is described below, a right of first refusal does not set the price or other terms of a future sale or lease. Rather, the holder of a right of first refusal—the developer in this case—only gets the right to match other future offers to buy or lease the farmer’s property. If the holder of a right of first refusal declines to match another party’s offer, that other party may then purchase or lease the property from the farmer.

Because a right of first refusal does not take the property out of the development market, it can be beneficial to farmers. However, some risk may be involved in this type of arrangement if other developers are unwilling to pursue or attempt to acquire property that is already subject to a right of first refusal agreement.

4. Option to Purchase or Lease

Instead of selling a right of first refusal to a developer, a farmer may want to sell what is called an option that allows the developer to either purchase or lease the land from the farmer at a later date. An option gives the developer the right to purchase or lease land in the future—at a pre-determined price and subject to agreed-upon terms.

Unlike a right of first refusal, an option effectively removes property from the market while the developer determines whether to proceed with the project. The terms of the final purchase or lease are negotiated and set forth in an option agreement. Typically, the option agreement will also provide compensation for the fact that the farmer is keeping their property off the market.

With an option, the developer has a set period of time, called the option period, within which the developer can decide whether to actually purchase or lease the land. At the end of the option period, the developer must decide whether to purchase or lease the property at the price and terms agreed to in the option agreement, or whether to give up all interest in the land. The option right is forfeited if the developer does not exercise it by the agreed-upon date.

During the option period, which can last months or even years, a farmer cannot accept a better offer that comes along. Rather, the farmer can only sell or lease the land to the developer who holds the option, and according to the terms and price previously negotiated by the parties. At present, option agreements are commonly used in solar development.

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34 For additional considerations and issues that can arise in right of first refusal agreements, see CARL J. CIRCO, Interpreting Stale Preferential Rights to Acquire Real Estate: Beyond the Restatement of Property, 62 Vill. L. Rev. 603, 612, 618 (2017); see also KATHRYN E. ALLEN ET AL., Rethinking Rights of First Refusal, Rights of First Offer, and Options to Purchase, American Bar Association (Oct. 23, 2017), available at: https://www.americanbar.org/groups/gsolo/publications/gsolo_eereport/2017/october_2017/rethinking_rights_first_refusal_rights_first_offer_options_purchase/.

5. Covenants

A covenant is typically a restriction on an owner’s right to use their property in a specified way. With many wind and solar energy projects, a single contract can contain multiple covenants.

A covenant that restricts use of land is called a restrictive covenant. For example, in order to enroll in the Minnesota Agricultural Preserve Program, farmers must enter into a restrictive covenant that limits their land use to agriculture or forestry for a period of at least eight years. Any farmers who are enrolled in this program would need to be sure that installing a solar or wind project on their land does not violate a restrictive covenant.

Covenants are also sometimes incorporated into wind and solar energy agreements. For example, if a farmer sells a portion of a large parcel of land to a developer, the farmer may agree that, if the remainder of the parcel is sold, the deed will contain a restrictive covenant preventing the new owner from obstructing the developer’s access to the wind or sun.

When a covenant is properly recorded, it binds later purchasers of the land, whether those purchasers are burdened or benefited by the covenant. However, Minnesota has laws that limit the duration for which covenants can remain in effect. Under Minnesota law, most covenants cease to be valid thirty years after the date of the deed or instrument that created the covenant.

6. Sale

Although developers are usually not interested in purchasing farmland in order to install a wind or solar energy system, if that is what a developer wishes to do, a farmer can sell a portion of their land to the developer. A sale typically conveys to the developer—as the buyer—all of the farmer’s interests in, and rights to, a piece of the farmer’s land. The farmer is paid in full at the time of the exchange, and the developer is then free to use the property for any legal purpose.

The sale of land for the purpose of a wind or solar project is not ideal for those farmers looking to continue to use their land for agricultural purposes. Nonetheless, if a farmer wishes to sell property to an energy developer, the farmer should be sure to use a market value of the property that includes the value of the wind or solar resource.


When a farmer decides to convey an interest in their land to an energy developer, the farmer and the developer will enter into one or more contracts. This is true no matter what type of

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36 MINN. STAT. §§ 40A.01, 40A.10, 40A.11, subd. 1.
38 MINN. STAT. § 500.20, subd. 2a.
conveyance the farmer and developer agree upon—easement, lease, right of first refusal, etc. In all contracts, it is essential that the farmer understand each of the terms and conditions of the agreement. If there are terms or conditions the farmer disagrees with, the farmer has every right to negotiate with the developer before signing the agreement and becoming bound by its terms. Consulting with an attorney is always recommended before signing any contract.

Although wind and solar projects differ in a variety of ways, many of the provisions and terms that a farmer is likely to find in a solar or wind contract will be similar. Below is an explanation of some common contract clauses that farmers are likely to encounter when working with an energy developer.

1. Duration

Wind and solar contracts generally last for decades.\(^{40}\) Wind energy easements often have a term of thirty to fifty years,\(^{41}\) while solar easements can last for twenty to thirty years.\(^{42}\)

In some contracts, there will be an initial duration—for example, twenty years—followed by one or more option periods during which time the contract may be renewed. The contract may require that both the farmer and the developer agree to renew the contract, or the contract may provide the developer with the exclusive right to renew the agreement, even without the farmer’s consent.

Because of the long duration of most energy agreements, farmers should carefully consider what their goals are for their land and how the length of any contract may impact those goals.

2. Land Use Restrictions

Energy agreements can impact farmers’ use of their land at every stage of the project, including during the planning, construction, and operation/maintenance phases. In most cases, an agreement between a farmer and an energy developer will include multiple provisions that either restrict the farmer’s use of the land (restrictive covenants or negative easements) or grant the developer access to various parts of the land (affirmative easements) during each phase of the project. Before signing an agreement with an energy developer, farmers should carefully consider how the use of their land will be affected throughout the duration of the project.

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\(^{40}\) WINDUSTRY, “Wind Energy Easement and Lease Agreements” [Link]
\(^{41}\) KRISTINE A. TIDGREN, Evaluating a Wind Energy Agreement: A Brief Overview [Link]
a. Initial Planning Phase

Most energy agreements will include an easement that grants the developer initial access to the land so that the developer can obtain information about the property’s topography, conduct wildlife studies and soil tests, and measure the property’s wind speed or sunlight in order to determine whether the land is suitable for the energy project. Sometimes these preliminary easements are blanket easements, meaning that the developer has the right to go anywhere on the property for any purpose. If a farmer is uncomfortable with granting a blanket easement, the farmer can try to negotiate and limit the easement—for example, by granting the developer access to the property only for certain purposes, such as purposes that are “reasonably necessary” to the project.

b. Construction Phase

Energy projects will also likely include a construction easement, which grants the developer access to areas of the property that are necessary during the construction and installation of the wind turbines or solar panels.

When evaluating easements for the construction phase, farmers should consider what impact extra machinery may have on their land, where any “laydown areas” may be located (places where the developer stages equipment until it can be assembled and installed), and whether any temporary roads will need to be built in order to carry out the construction.

With wind turbine construction, some farmers have reported issues with drainage tiles being broken or damaged when the turbines are installed. Farmers may want to consider including a provision requiring that any underground infrastructure or land grading be done using a double ditching technique, or similar method. Double ditching guarantees that topsoil is separated from subsoil, and ensures that each soil layer is returned to its appropriate depth when the ditch is later filled.

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If farmers are concerned about potential harm to their land during the construction phase of the project, they should consider negotiating specific terms or compensation provisions that address the potential negative impacts that the construction could have on the land.

c. Operation/Maintenance Phase

Energy agreements might also include certain provisions covering the operation or maintenance phase of the project. Various issues can arise during this phase of an energy project, and to avoid future conflicts, those issues should be addressed in the agreement. For example, if the energy project involves construction of underground transmission lines, farmers should be sure the agreement requires that the developer ensure the lines are installed below plow depth and remain below that depth, even if the land erodes or later requires soil fill in order to keep the lines under the agreed-upon depth. With solar projects, farmers will want to be sure that any responsibilities with respect to the maintenance of fencing surrounding the solar panels, including the establishment and mowing of grass or low-growth prairie under the panels, are clearly outlined in the agreement. If the farmer would like to require that certain types of plantings be established under the panels—for example, pollinator habitat—the agreement should also reflect those requirements.

d. General Land Use Considerations

For both wind and solar energy projects, a farmer will want to consider the ways in which the agreement restricts their access to or use of the land, as well as the extent to which the agreement grants the developer access to the land. For example, may the farmer enter onto the leased property without permission from the developer? Will any of the provisions in the agreement prevent the farmer from building on the land or installing additional structures? May the developer enter onto the farmer’s property at any time of day? Does the agreement require that the developer provide the farmer with notice before entering the property? Any land use restrictions that raise concerns for a farmer should be negotiated before the farmer signs the agreement.

e. Energy-Specific Land Use Considerations

Some land use restrictions are unique to the type of energy project being developed. Below are examples of common restrictions for wind and solar projects.

i. Wind Energy Systems

Generally speaking, wind energy projects allow for farmers to share in the usage of a majority of the land that is being utilized by developers.
Nonetheless, farmers will likely face a variety of restrictions that can impact how they use the land. For example, a wind agreement might include a wind nonobstruction provision, which grants the developer the right to capture and use the unobstructed flow of wind currents over the farmer’s property.\textsuperscript{49} In conjunction with nonobstruction easements, it is common for developers to seek provisions that prohibit the farmers—as landowners—from engaging in activities that interfere with or obstruct the wind speed and direction.\textsuperscript{50} Farmers should be aware that even low structures, such as homes or barns, can create turbulence which travels downwind for distances of up to fifteen to twenty times the structure’s height. It is very important, therefore, for farmers to consider any future development goals for their property, and how those developments might impact a nonobstruction agreement.

With wind energy projects, it is also possible that either the farmer or the developer (or both) may seek to include a noise easement within the larger energy agreement.\textsuperscript{51} A noise easement could provide setback provisions that require turbines to be a certain number of feet away from an occupied house, or specify a noise range (often defined in decibels) within which the sound from the turbines must remain.\textsuperscript{52}

\textbf{ii. Solar Energy Systems}

In any agreement for the installation of solar panels, farmers should be aware of any non-obstruction easements or restrictive covenants that might prevent the farmer from causing, building, or installing anything that would obstruct sunlight to the property. Any future plans to construct things such as granaries, grain elevators, or windmills could create shadows and therefore conflict with a non-obstruction easement or restrictive covenant.\textsuperscript{53} In addition, unlike wind projects, which lend themselves more easily to shared use of the land, solar energy projects are land intensive and often require that the developer have exclusive use of the property.\textsuperscript{54} Accordingly, farmers who wish to retain use of the land will want to consider whether the agreement allows them to do so. For example, if the solar equipment is situated high enough, and with sufficient protection, some agreements will permit farmers to graze sheep, or even cattle, along the inside of the perimeter fence or under the solar energy system itself.

\begin{itemize}
  \item \textsuperscript{49} \textsc{windustry}, \textit{Wind Energy Easement and Lease Agreements}, 3 (Sept. 2005).
  \item \textsc{windustry}, \textit{Wind Energy Easement and Lease Agreements}, 3 (Sept. 2005).
  \item stoe\textsc{l}
  \item stoe\textsc{l}
  \item \textsc{stoel rives}, llp, \textit{the law of solar: a guide to business and legal issues} (5\textsuperscript{th} ed. 2017), ch. 1, p. 2, available at: https://www.stoel.com/lawofsolar.
\end{itemize}
3. Assignment Clauses

An assignment clause is a provision in an agreement that allows a party to sell or transfer its rights under a contract to another party, called an assignee. Some agreements provide that developers can assign their rights without first seeking permission from the farmer. In such a situation, the farmer could one day become bound by an agreement with a company with which they are unfamiliar. To avoid this situation, farmers can negotiate the terms of an assignment clause. For example, a farmer could seek to have the contract include a list of circumstances under which the farmer’s written permission is needed before the developer can assign its rights to another party. This allows the farmer to research the potential assignee before granting permission to the developer to assign its rights and obligations to that party. At a minimum, the farmer will want to be sure the agreement states that the developer will provide notice to the farmer when an assignment is taking place. Finally, a farmer might consider negotiating for a clause that holds the developer liable if the contract is assigned to a third party and that third party fails to satisfy the terms of the original agreement.


Liability is an important topic of consideration for any farmer who is thinking about investing in a solar or wind energy system, and especially for farmers who are negotiating contracts with energy developers. Generally speaking, farmers implementing a wind or solar project on their land could face three types of liability—contract, negligence, and regulatory.

a. Contract Liability

Contract liability arises from a party’s failure to fulfill its contractual obligations. If one party to a contract believes the other party has failed to meet its commitments under the agreement, a breach of contract action may be brought in a court of law. In most cases, the agreement should expressly state what type of events will be considered a default, or breach, under the contract. For example, the failure of a party to pay an amount when it is due, or the bankruptcy or liquidation of any party, are both common default events. The agreement should also state how long the defaulting party has

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to fix the default before the non-defaulting party can pursue other legal remedies.

Depending on the terms of the agreement, if a party is found to have breached the contract and fails to cure that breach within the agreed-upon timeframe, that party could be required to pay a set amount of damages, which could include paying for the other party’s legal costs and attorneys’ fees. It is important, therefore, that farmers entering into energy agreements be certain they fully understand all of the terms of their contract and what their obligations and rights are under the agreement.

In addition, security agreements, such as mortgages, often include restrictions on the owner’s use of the property.60 These restrictions can include prohibitions against easements or leases that transfer an interest in the property to a third party, as well as prohibitions against allowing a third party to obtain a lien on the property.61 Insofar as wind and solar energy projects are concerned, farmers should make sure that any agreement with an energy developer does not jeopardize an existing mortgage or other security agreement that the farmer is bound by.62 If a farmer violates the restrictions in a mortgage, for example, the farmer could be found to be in default under that agreement and could then face a variety of consequences, such as being forced to pay off the loan immediately or risk foreclosure of the mortgaged property.63 Before signing an agreement with an energy developer, farmers should consult with an attorney to ensure they are complying with any existing mortgages and security agreements.

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60 Generally speaking, security agreements are contracts that create what the law calls a “security interest” in the debtor’s property—for example, the debtor’s house in the case of a mortgage—and give the creditor the power to take possession of that property if the debtor defaults on the agreement. For more information on security agreements, see ROGER A. MCEOWEN, Agricultural Law in a Nutshell, 75-127 (2017). For a discussion that focuses on Minnesota, see FLAG, Farmers’ Guide to Minnesota Lending Law, Chapter 4 (2003), available at: http://www.flaginc.org/wp-content/uploads/2013/03/FGMLL2003.pdf.


62 For example, if certain bills are not paid, a developer could take out a mechanic’s lien on the farmer’s property for the reasonable value of the work (including labor, materials, and machinery), even if the farmer is not responsible for paying those bills. In other words, a lien could attach to the farmer’s property due to actions or inactions that are outside of the farmer’s control. JESSICA A. SHOEMAKER, Farmers’ Guide to Wind Energy: Legal Issues in Farming the Wind 5 – 5 (FLAG June 2007), available at http://www.flaginc.org/wp-content/uploads/2013/03/FGWEcomplete.pdf; see also, MINN. STAT. § 514.01.

b. Tort Liability

Wind and solar energy projects can also put a farmer at risk for tort liability, though to date in Minnesota, this type of liability is rare. Generally speaking, tort liability arises between parties who do not otherwise have a contract that governs the terms of their relationship.

With respect to farmers who engage in renewable energy production, tort liability might occur in a couple of different ways. For instance, a tort could arise between a farmer and a person who becomes injured on the farmer’s land due to a hazard related to wind turbines or solar panels. This type of tort is called negligence. A tort could also arise between the farmer and their neighbors, if the farmer’s actions impact the neighbors’ ability to use and enjoy their land. In legal terms, this type of tort is called a nuisance action. Minnesota law currently protects some agricultural operations from nuisance actions, but several requirements apply, and farmers are advised to consult with an attorney if any nuisance liability concerns arise.

Farmers can safeguard themselves from potential liability by taking reasonable care in the maintenance and care of areas surrounding their wind or solar projects, and by obtaining liability insurance sufficient to cover any unexpected tort claims. Farmers can also negotiate with energy developers to ensure that agreements include provisions requiring that the developer carry sufficient liability insurance (which names the farmer as an additional insured), that the developer defend the farmer against claims by third parties of harm arising from the developer’s energy project (meaning provide for the farmer’s legal defense), or that the developer indemnify (meaning compensate) the farmer for any amount of money the farmer must pay as a result of a lawsuit.

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64 As of November 2018, only one tort case relating to wind or solar projects in Minnesota could be found. In this unpublished case, Nygard v. Rogers, No. A14-2175, 2015 Minn. App. Unpub. LEXIS 1041, at *3 (Nov. 16, 2015), the Minnesota Court of Appeals affirmed a lower court’s ruling that a wind turbine’s strobe-light created a nuisance by interfering with the neighboring landowners’ use and enjoyment of their property.


67 Minnesota’s law governing nuisance claims against agricultural operations can be found at MINN. STAT. § 561.19.


c. Regulatory Liability

Regulatory liability can arise when a solar or wind project does not comply with applicable state and federal statutes and regulations, including those for the siting and operation of the project. In such a situation, a legal claim could be brought (often by the government) asserting that harm resulted from the actions that were specifically prohibited by state or federal law.

There are a wide range of laws that could lead to regulatory liability for a farmer (or developer) who is responsible for a wind or solar energy system. For example, although state agencies control the permitting of wind turbines, turbines nonetheless have the potential to interfere with wildlife, which in turn could implicate the federal Migratory Bird Treaty Act, the Bald and Gold Eagle Protection Act, or federal and state endangered species laws.

In addition, both solar or wind projects have the potential to conflict with the requirements of various United States Department of Agriculture (USDA) programs, including the Grasslands Reserve Program, the Wetlands Reserve Program, the Conservation Reserve Program, and the Farm and Ranch Land Protection Program. Farmers should carefully consider how their enrollment in or eligibility for any such programs could be jeopardized by a renewable energy system.


Insurance is another topic of consideration for any farmer negotiating with an energy developer. In general, farmers should ensure that any agreement with an energy developer includes a provision requiring that the developer defend and hold the farmer harmless from claims of any future loss or damage to persons or property arising from the developer’s use and occupation of the land. Similarly, a developer will likely seek a promise of indemnity from the landowner for any losses the farmer may cause to the wind or solar operation. These are known as indemnification.
clauses. In some cases, an indemnity clause may include a requirement that the party at fault pay the other party's reasonable attorney fees should any disputes arise.

Farmers might consider requiring that a developer hold or acquire an insurance policy to protect against any damages that arise from the development or ongoing operation of the energy project. Possible damages that could arise include damage to the farmer's land, structures, equipment, livestock, or crops, as well as personal injury or property damage suffered by third parties.80


Compensation for any energy project is dependent on a variety of factors and can be subject to change as the industries continue to evolve.81 In addition, many developers do not publicly disclose their landowner compensation packages, and in some cases the agreements may expressly prohibit farmers from revealing the terms of their compensation. For these reasons, it is difficult to state what the “average” compensation for a farmer should be.

In all cases, however, farmers will want to ensure that the compensation terms within an agreement are clearly outlined and defined.82 This means that the relevant start and ends dates for the compensation should be stated. In addition, if compensation is tied to the amount of land being leased, the unit of measurement—whether by acre, square foot, or some other measure—should be clear. Farmers should also consider whether the agreement provides a means for the farmer to audit their payments, and whether it affords the farmer access to the documents and records needed to complete the audit, including, potentially, the energy meter readings for the project.

As with most contract provisions, the devil is in the details, and farmers should always be sure to understand the details of how they will be compensated.

a. Wind Compensation

Factors that can affect a farmer’s compensation for wind development include the farmer’s wind resource, land value, transmission access, size of the turbines, competition, and the price of energy.83 In general, a farmer might be offered compensation that comes in the form of fixed payments, royalty payments, or the less common one-time lump sum payment. It is also

83 WINDUSTRY, Wind Energy Easements and Leases: Compensation Packages, 5-6 (June 2009), available at: https://d3n8a8pro7vhmx.cloudfront.net/windustry/legacy_url/944/Compensation-2009-07-06.pdf?1421782808.
possible for farmers to receive a combination of compensation types.\textsuperscript{84} For example, farmers are often offered a blend of fixed and royalty payments, which ensure that the farmers receive a minimum amount of compensation while also allowing for variability in the payments depending on changing wind energy outputs.

There are pros and cons to each form of compensation, and the needs of each farmer will be different. Accordingly, the type of compensation package that is best for one farmer might not be best for another.

Fixed payments allow the farmer to know exactly how much to expect each month or year from the project, even if the turbines sit idle.\textsuperscript{85} However, fixed payments are not tied to the success of the wind project and therefore there is no potential for the farmer to be compensated more if the project performs better. Also, a fixed payment structure without an annual or periodic escalator will lose value overtime with cost inflation.

Royalty payments tie the farmer’s compensation to the success of the project. In this respect, a farmer could potentially receive more under a royalty payment than with a fixed payment. However, the potential for greater reward can be offset by the greater risk inherent in this type of compensation package. Royalty payments, by their nature, are also more variable and therefore less reliable. If a farmer is considering royalty payments as compensation, the farmer should be sure that the agreement clearly defines how the royalties will be calculated—for example, whether they are based on net profit or gross revenue.

One-time lump sum payments have become less common in recent years with the wind industry.\textsuperscript{86} While lump sum payments can be advantageous because they offer guaranteed immediate compensation, they also have their disadvantages. For example, a one-time payment precludes the value of the wind project from remaining tied to the land.\textsuperscript{87} In other words, the value of the farmer’s land could be reduced for future heirs or if the land is later sold, because any compensation benefits from the project cease after the one-time payment has been made. In addition, there could be undesirable tax consequences to receiving a large, lump sum payment.\textsuperscript{88}

\textsuperscript{84} WINDUSTRY, \textit{Wind Energy Easements and Leases: Compensation Packages}, 6 (June 2009), available at: https://d3n8a8pro7vhmx.cloudfront.net/windustry/legacy_url/944/Compensation-2009-07-06.pdf?1421782808.

\textsuperscript{85} WINDUSTRY, \textit{Wind Energy Easements and Leases: Compensation Packages}, 7 (June 2009), available at: https://d3n8a8pro7vhmx.cloudfront.net/windustry/legacy_url/944/Compensation-2009-07-06.pdf?1421782808.


\textsuperscript{87} WINDUSTRY, \textit{Wind Energy Easements and Leases: Compensation Packages}, 7 (June 2009), available at: https://d3n8a8pro7vhmx.cloudfront.net/windustry/legacy_url/944/Compensation-2009-07-06.pdf?1421782808.

b. Solar Compensation

Compensation for solar projects, like wind projects, can come in a variety of forms. Farmers can be paid for the various easements they grant the developer (access easements, construction easements, etc.) as well as for the developer’s lease of the farmer’s land. With lease payments, farmers should fully understand whether they are being paid for the acres that the developer is leasing, the capacity of the energy system, or the revenue that is generated. As with wind payments that are based on revenue, farmers negotiating solar leases should be sure that the calculation of the revenue is clearly defined, whether based on net profits or gross revenue. Farmers may also consider negotiating for rent payments that increase by a certain percentage over time.

c. Other Forms of Compensation

Besides compensation for the actual energy project itself, farmers may want to consider negotiating for other types of compensation. For example, a farmer could negotiate to have the developer pay for the farmer’s attorney’s fees so that the farmer may get specific legal advice before signing a contract with the developer. A farmer may also want to negotiate for an installation fee, or a “lay down” payment that compensates the farmer for the temporary inconvenience caused by the installation of the project, including the use of heavy machinery that could harm the land. Potential damage to a farmer’s drain tiles can be negotiated in advance, as well as compensation for any work the developer may need to do that conflicts with the farmer’s planting or harvest schedule.

C. Tax Considerations

Before undertaking a solar or wind energy project or signing any agreement with an energy developer, farmers should carefully consider the tax implications of their desired project. This includes consideration of personal property taxes, property taxes on real estate, and any applicable taxes on the generation or sale of electricity. Ideally, any agreement between a farmer and an energy developer will outline the parties’ respective responsibilities for paying the applicable taxes.

Because the tax implications of a renewable energy project are dependent on a variety of factors that will differ from farm to farm, farmers should always seek guidance from a tax attorney or advisor before signing any energy agreement. Nonetheless, some basic tax information is included below as a means of providing farmers with a baseline of knowledge. This information may help guide farmers in formulating appropriate questions to ask if they are approached by energy developers.

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1. Changes to Land Use Designation

Farmers should always consider whether the energy project will cause their land use designation to change—for example, from agricultural to commercial. Changes in land use designations can lead to increases in property taxes. As with any contract provision, farmers have the ability to negotiate with the developer and can seek to include language stating, for example, that the developer will hold harmless the farmer and will pay any increase in property taxes due to the change in land classification.

2. Minnesota Personal Property Tax

Under Minnesota law, the personal property of both a wind energy conversion system and a solar energy generating system is exempt from property tax. For purposes of this exemption, a wind energy conversion system is defined as “any device, such as a wind charger, windmill, or wind turbine, which converts wind energy to a form of usable energy.” By contrast, a solar energy generating system is “a set of devices whose primary purpose is to produce electricity by means of any combination of collecting, transferring, or converting solar generated energy.” These exemptions only apply to the owner of the solar or wind systems.

3. Minnesota Sales and Use Tax Exemptions

As a general rule, solar and wind energy systems are exempt from Minnesota’s sales and use taxes. The Minnesota sales tax applies to the retail sale of personal property within the state, while the use tax applies to personal property that is purchased from outside of Minnesota, but used within the state.

Minnesota law exempts wind energy conversion systems from its sales and use taxes when those systems are used as an electric power source. This exemption also covers the materials used to manufacture, install, construct, repair, or replace the system. For purposes of this exemption, a wind energy conversion system is defined again as “any device, such as a wind charger, windmill, or wind turbine, which converts wind energy to a form of usable energy.”

Solar energy systems are also exempt from Minnesota’s sales and use tax laws. Under this exemption, a solar energy generating system is “a set of devices whose primary purpose is to produce electricity by means of any combination of collecting, transferring, or converting solar generated energy.” All components of a solar energy system, including the panels, wiring, pipes, pumps, and racks, fall within this...

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91 For example, see MINN. STAT. §§ 272.02, subd. 22, 24; § 273.13, subd. 22-24.
92 MINN. STAT. § 272.02, subs. 22, 24.
93 MINN. STAT. § 216C.06, subd. 19; see also, Minn. Stat. § 272.09, subd. 2(a)(1).
94 MINN. STAT. § 272.0295, subd. 2(a).
95 MINN. STAT. § 297A.68, subd. 12.
96 MINN. STAT. § 272.02, subs. 22, 24. For more information on the sales and use tax exemption for wind energy conversion systems, see NC Clean Energy Technology Center, Wind Energy Sales Tax Exemption, at: http://programs.dsireusa.org/system/program/detail/601.
97 MINN. STAT. §§ 297A.68, subd. 12, 216C.06, subd. 19.
98 MINN. STAT. § 297A.67, subd. 29.
99 MINN. STAT. § 216C.06, subd. 17.
exemption. This exemption applies to anyone—farmer or developer—who purchases these items.

4. Minnesota Energy Production Tax

While personal property taxes do not extend to wind or solar energy systems, Minnesota does impose a production tax on the electricity produced from these systems where the capacity of the systems exceed a certain megawatt (MW) threshold. In general, the rate of this tax increases as the size of the energy project increases.

In most cases, the energy systems that meet the megawatt thresholds to become subject to this tax will be owned by a developer who will be responsible for paying the tax. Farmers who own their own smaller-scale wind turbines or solar arrays to power their farms are likely exempt from this tax.

a. Wind Energy Production Tax

With a wind energy conversion system, the tax rate ranges from 0.012 cents per kilowatt-hour (kWh) (for systems with a capacity of .26 MW to 2 MW) to 0.12 cents per kWh (for systems greater than 12 MW). The owner of a wind energy conversion system of .25 MW or less is exempt from Minnesota’s wind energy production tax.

b. Solar Energy Production Tax

For solar energy generating systems, any system with a capacity that exceeds one megawatt alternating current is subject to a tax of $1.20 per megawatt-hour (MWh). All other systems—those with a capacity of 1 MW alternating current or less—are exempt from the solar energy production tax.

5. Minnesota Property Tax on Real Estate

The property tax rates for the land on which an energy system sits will vary according to the type of energy being harnessed.

For wind energy conversion systems, each county has the discretion to determine the tax rate for the real property located within its borders on which a wind system sits. For example, counties may approve a real property tax rate that is based on the most probable use for the land if the land were not improved with a wind energy conversion system (most likely, this means a land classification of agricultural or rural vacant land).

100 For more information on the sales and use tax exemption for solar energy systems, see http://programs.dsireusa.org/system/program/detail/1218.

101 MINN. STAT. §§ 272.029, 272.0295. For more information on Minnesota’s wind and solar energy production taxes, see NC Clean Energy Technology Center, Solar Energy Sales Tax Exemption, at: http://programs.dsireusa.org/system/program/detail/1218.

102 MINN. STAT. § 272.029, subd. 3(a).

103 MINN. STAT. § 272.029, subd. 3(b).

104 MINN. STAT. § 272.0295, subd. 3(a).

105 MINN. STAT. § 272.0295, subd. 3(b).

106 MINN. STAT. § 272.02, subd. 22.
For solar energy generating systems that are subject to the solar energy production tax (meaning that they are larger than 1 MW alternating current), the real property will be taxed as class 3a property, which is the tax rate for both commercial and industrial property, as well as for utility real and personal property.\textsuperscript{107} If the solar energy system is not subject to the production tax, the land on which it sits will be taxed without regard to the solar system.\textsuperscript{108}

6. Federal Tax Credits

Although current federal tax laws provide credits for both wind and solar energy operations, these credits are generally only available to developers. Accordingly, farmers who lease land to a wind or solar developer cannot take advantage of either the federal solar investment tax credit (“ITC”) or the federal production tax credit (“PTC”) for commercial wind projects.\textsuperscript{109}

D. Equipment Responsibility and Maintenance

Farmers who are considering partnering with energy developers or adding renewable energy structures to their land should be sure the agreement outlines the specifics of who will be responsible for the equipment and maintenance of the project. Many agreements will state that the developer will "own and operate" most of the equipment in question, but in some cases farmers may be responsible for maintaining areas around the perimeter or fencing of the project. Any such responsibilities should be clearly outlined in the agreement so the proper party can respond if and when issues arise. In the event something does go wrong, it will be important for the farmer to know who to contact and how to proceed. Farmers will also want to know how often the developer or project owner will conduct maintenance on the project, and whether the developer will provide advance notice to the farmer of any work to be done.

E. End of Project and Decommissioning of Site

When signing long-term energy contracts, it is crucial not to overlook creating a plan for when the project reaches its end. This is especially important because the developer with whom a farmer initially signs an agreement may not be the same developer who is overseeing the project in twenty or thirty years when it is ending. Putting a plan in place at the outset for the decommissioning and remediation of the project site can help to alleviate problems down the road. Moreover, many Minnesota counties require decommissioning plans that outline the specifics of the decommissioning process, and in some counties the

\textsuperscript{107} MINN. STAT. §§ 272.02, subd. 24, 273.13, subd. 24.
\textsuperscript{108} MINN. STAT. § 272.02, subd. 24.
\textsuperscript{109} For example, see 26 U.S.C §§ 25D, 48 (solar ITC) and 26 U.S.C. § 45 (wind PTC).
parties involved must provide proof of the plan as well.\textsuperscript{110} As part of these required plans, some counties may require that the developer post a decommissioning bond, or provide other assurances that the decommissioning process will occur even if, for example, the company goes bankrupt.\textsuperscript{111} If such financial assurances are not required by the farmer’s county (or other applicable laws), the farmer may negotiate with the developer to ensure that the contract incorporates a provision requiring the developer to set aside funds specifically for the decommissioning process and restoration of the land.

At the end of a project, turbines or solar panel equipment may have some scrap metal value that the developer might seek to retain. The agreement, however, should address more than just the handling of the project’s physical hardware once it reaches completion. It should also include terms relating to remediation of the site, as well as the removal of access roads, underground cables, cement foundations, and other structures used during the life of the project. For example, with wind projects, it is common for agreements to state that the developer will remove all visible traces of the project (except usable roads) and only so much of the underground installations as required for returning the land to a suitable use for farming.\textsuperscript{112}

With provisions related to decommissioning and remediation of the project, farmers should be cautious about agreeing to overly-broad language that could be interpreted in various ways. Instead, farmers should negotiate for specific terms that outline how the developer should restore the land. Does the farmer want to include provisions that address soil compaction? Should the developer be responsible for restoring certain types of vegetation or installing conservation structures? Is there a timeframe included in the agreement for how long the developer has after the project ceases to complete the decommissioning process?

**F. Termination of the Agreement**

Any wind or solar agreement should describe the conditions under which the contract may be terminated, as well as what may be required by the parties to avoid termination. Developers may seek to include provisions that allow them to voluntarily terminate a lease or easement at the developer’s option, and often at their complete discretion, meaning they would not need good cause to terminate the agreement. Other agreements might outline the specific circumstances under which either party may terminate the agreement. In either

\textsuperscript{110} For example, see (1) http://www.co.martin.mn.us/images/Ordinances/Martin_County_Renewable_Energy_Ordinance.pdf (Martin County); (2) https://www.co.nicollet.mn.us/DocumentCenter/View/438/Renewable-Energy-Ordinance-PDF?bidId= (Nicollet County); (3) https://www.co.carlton.mn.us/DocumentCenter/View/931/Renewable-Energy-Ordinance-PDF (Carlton County); (4) https://www.chisagocounty.us/DocumentCenter/View/7211/Solar-Energy-Systems-Ordinance?bidId= (Chisago County); and (5) https://www.co.ym.mn.gov/vertical/sites/%7B9E2CF57F-0FF6-475F-BE0E-E5C421454DDB%7D/uploads/Section_XVI_-_Renewable_Energy.pdf (Yellow Medicine County). In addition, the Minnesota Local Government Wind Toolkit, which was prepared for the Minnesota Department of Commerce by the GREAT PLAINS INSTITUTE, recommends that counties include decommissioning requirements in any local wind energy ordinance. See http://www.macpza.org/2017WindModelOrdinanceFinal.pdf.


case, farmers should be sure they understand exactly how the contract may be terminated and by whom.

IV. Other Considerations

Several other considerations deserve attention for farmers who are considering pursuing wind or solar energy systems on their farms.

A. Effect of Energy Projects on Federal Farm Programs

Before signing any agreement—whether a lease, easement, covenant or permit—farmers should be sure they understand how the agreement will impact their eligibility for, or benefits from, government farm programs (such as commodity payment programs or conservation programs).

For example, land in the Conservation Reserve Program (CRP) may have limits on the number and location of wind turbines that may be installed on CRP land. CRP payments can also be reduced if there are wind turbines on the land.113 In addition, some federal programs require land to be in agricultural production.114 If a wind or solar project removes some of a farmer’s land from agricultural production, the farmer’s funding could be jeopardized. Farmers should contact their local Farm Service Agency office to discuss the potential impact of pursuing a wind or solar project on their land.

B. Local Zoning and Permitting

Farmers who are considering establishing a solar or wind project on their land will want to consider the applicable zoning or permitting rules in their counties. Many Minnesota counties have enacted renewable energy ordinances that outline the various requirements for applying for and implementing a solar or wind energy system.115 These local renewable energy ordinances often outline the application process, and siting and setback requirements, and describe when a project needs special permitting. The specific requirements of a zoning or renewable energy ordinance will vary from county to county, and farmers should do research to find out which rules apply to their situation.

In addition, farmers should make sure that any agreement with an energy developer designates who will be responsible for ensuring compliance with local regulations, as well as who will be responsible for paying the applicable fees or expenses.

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C. Stray Voltage

Stray voltage, sometimes called “earth current,” refers to small voltage differences that can exist between two surfaces that are accessible to animals, such as stanchions, waterers, and floors. When an animal comes into contact with both surfaces at the same time, an electrical current will flow through the animal’s body, and if the current is strong enough it can be felt by the animal and can cause discomfort, distress, and behavioral changes. Stray voltage has been an especially difficult problem on some dairy farms, which has resulted in litigation.\(^\text{116}\) Although it appears none of these lawsuits have been related to solar or wind power, some people have nonetheless raised concerns regarding the connection between solar and wind systems and stray voltage.\(^\text{117}\)

The specifics of stray voltage concerns are beyond the scope of this Guide. Useful sources to consult regarding stray voltage include a 2015 publication, *Minnesota Stray Voltage Guide: A Guide Addressing Stray Voltage Concerns*, that was developed, in part, by the Minnesota Farmers Union.\(^\text{118}\) In addition, a 2014 publication issued by University of Wisconsin-Extension and the Midwest Rural Energy Council, *Wind Turbines & Farm Stray Voltage*, provides a discussion of when and how stray voltage occurs on farms with wind turbines and how it can be prevented.\(^\text{119}\)

If a farmer has specific concerns about the possibility of increased stray voltage with the installation of a wind or solar project, the farmer should work with the developer and consult their electricity provider and other experts to address those concerns.

D. Impact of Natural Disasters

Unfortunately, we are living in a time when natural disasters are becoming more and more common. While Minnesota farmers do not have to worry about the devastating effects of hurricanes and large-scale wildfires, farmers might consider working with developers to include provisions in their agreements that address what happens in the case of a tornado or flood that damages the energy system.

V. Conclusion

Incorporating wind or solar energy into a farming operation can be an enticing option for diversifying a farm and its revenue stream. In order to take advantage of these opportunities, farmers should proceed cautiously and carefully consider how such a project might impact their long-term goals for their land. When agreements with developers are involved, farmers should be sure they fully understand each term of the contract and what their rights and obligations

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\(^{116}\) A recent Iowa State publication summarizes some of this activity. MARY FRANCOUE, *Stray Voltage and Dairy Farms Can Lead to Large Damage Awards*, Iowa State Center for Agricultural Law and Taxation (May 16, 2018) at https://www.calt.iastate.edu/article/stray-voltage-and-dairy-farms-can-lead-large-damage-awards.


Farmers have every right to negotiate with developers in order to reach agreements that are fair and appropriate for their individual farming operations. To this end, consulting with knowledgeable attorneys is always advised before signing any agreement with an energy developer.
Additional Resources

There are many resources available to farmers who would like more information about pursuing wind or solar energy systems on their farms. Listed below are some of those resources, many of which were used in the creation of this Guide.

Additional Resources for Wind Energy Production:


Additional Resources for Solar Energy Production:


Farmers’ Legal Action Group, Inc.

6 West Fifth Street, Suite 650
Saint Paul, MN 55102-1404

Phone: 651-223-5400
Fax: 651-223-5400
Toll Free: 877-860-4349

Email: lawyers@flaginc.org
Website: www.flaginc.org

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305 Roselawn Avenue East, Suite 200
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Email: info@mfu.org
Website: www.mfu.org