

# PRODUCING SOLAR ENERGY

Solar panels can generate renewable energy for your farm. The energy generated can offset farm energy use and reduce energy costs, leading to lower greenhouse gas emissions. Solar panels can be installed on the roofs of barns or outbuildings or ground-mounted, free-standing panels can be located in fields or pastures. As more Canadian farmers adopt renewable energy sources, solar continues to be the most popular option<sup>3</sup>. Solar panels can last 25 to 40 years and offer an alternative energy generation or revenue stream.

## Benefits



Reduced GHG emissions



**Estimated return on investment**  
Medium



**On-farm emission mitigation potential +**

## Implementation Tips

- Obtain several quotes from different solar contractors and make sure to ask questions that allow you to choose the right solar panels for your farm set-up.
- The type of system (e.g., tracking system vs. stationary system) you choose will depend on where the solar panels will be located on your farm.
- Know the voltage types needed and consult with solar contractors and your local hydro provider to ensure you choose the correct set-up and reduce the chance of unforeseen costs.

## Resources

- **Report:** Implementing Solar Electricity On-Farm, British Columbia Ministry of Agriculture ([dfc-plc.info/PSE1](https://dfc-plc.info/PSE1))
- **Webpage:** Solar Electric Systems, OMAFRA ([dfc-plc.info/PSE2](https://dfc-plc.info/PSE2))
- **Webpage:** Shade and energy: solar panels used as shades in grazing pasture, University of Minnesota Extension ([dfc-plc.info/PSE3](https://dfc-plc.info/PSE3))

*We had the opportunity to install a solar system. For the price of a pick-up truck, I was able to put this on the roof of my barn. It returns income to me every day and runs flawlessly. Not only did we see a huge reduction in the bill, but we also are making power out of the sun, and it's awesome.*

— Jordan, a dairy farmer in Alberta