

# I There Has Never Been a Better Time to Adopt Solar Power for Farms

If you consider just the savings in electricity costs by using a free source of power, agrivoltaics makes a lot of sense. Of course you're not just reducing your monthly bills, you're also reducing carbon emissions and your dependency on the electricity grid. No wonder agriculture was one of the first industries to adopt solar systems – driven by economic incentives from government subsidies, tax breaks and financing programs.

Studies show that dual-use farming brings a lot of value added benefits. Crops grown under the partial shade of solar panels benefit from lower soil temperature during the day and warmer soil at night. Less water may be required to irrigate certain crops as a result. Elevated solar panels can provide shade for various livestock. And unused roof space on barns or other structures can be put to work generating free power to drive irrigation pumps and other equipment.

## Solar for farms with more power, more safety, more control

With a SolarEdge smart energy system, you get the peace of mind that comes with choosing the world's #1 PV supplier with the best technology and longest warranties. SolarEdge Power Optimisers harvest more energy from each PV panel, contributing to more power delivered over the system's lifetime for lower total cost of ownership (TCO). Your assets and structures are protected with innovative safety features like patented SafeDC™ functionality and arc-fault detection and interruption. And our panel-level Monitoring Platform gives you a real-time snapshot of energy production and consumption on your smartphone or PC.



Proven Energy Management installed this 99.82 kWp installation at Smithfield Cattle Co Sapphire Feedlot in Southern Queensland, Australia

## A financially solid company with an unmatched engineering pedigree

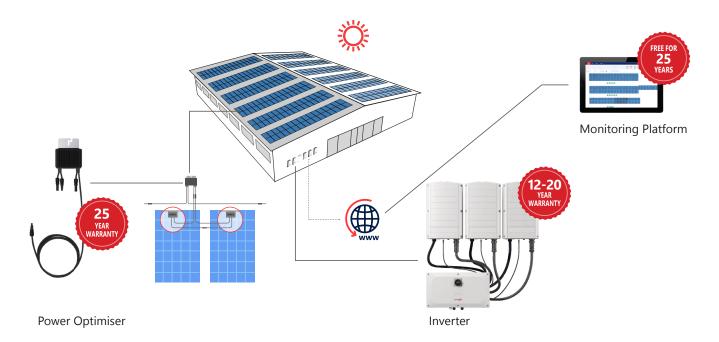
SolarEdge is a leading smart energy solutions company, delivering standard-setting products that power our lives and drive future progress. Leveraging world-class engineering and worldwide experience, SolarEdge developed a ground-breaking intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. As a result of this and other innovations, today SolarEdge is the world's #1 solar inverter company in revenue with millions of systems installed in more than 130 countries.

"We think about our client's investments as if they were our own, and strive to achieve the best results for every project undertaken. The use of quality, leading SolarEdge tech with detailed monitoring capabilities forms a big part of that."

Randall Martin, Proven Energy Management

# What You Get With Your SolarEdge Solar System

SolarEdge premium solar energy components work together in a seamless, farm-friendly ecosystem that can handle a variety of climate, terrain, livestock, crop and other agriculture challenges. Your SolarEdge PV system is comprised of these primary components:



## **Power Optimisers**

Photovoltaic (PV) panels are used to collect the solar energy. In every solar energy system, there are energy mismatches between PV panels caused by different issues such as shading, soiling, manufacturing tolerance, and more.

To remedy this, a SolarEdge Power Optimiser is connected to each solar panel to ensure it produces the maximum amount of power and does not impact other panels in the same string. They also enable more design flexibility where solar panels can be installed at different angles and azimuths. Compare this with traditional inverters where the weakest PV panel reduces the performance of all panels in the same string.

Each SolarEdge Power Optimiser is ammonia resistant to corrosion from ammonia gases and is backed with a 25-year warranty.

#### **PV** inverters

PV inverters convert the DC power received from the solar panels to AC power which you can use and also sell back to the grid\*. SolarEdge inverters are extremely efficient, compact, ammonia resistant to corrosion from ammonia gases, and IP65 rated to work in harsh environmental conditions.

SolarEdge inverters are backed with a 12-year warranty which can be extended to 20 years.





#### SafeDC™

To ensure the safety of your property or livestock in case of an emergency, SolarEdge includes a variety of exclusive safety features, including SafeDC™. This built-in panel-level safety technology minimises the risk of electrocution. Whenever the grid is down or the inverter is shut down during maintenance or due to an emergency, the system automatically switches to safety mode, wherein the output voltage of each panel is reduced to a touch-safe 1V in order to maintain string voltage below risk levels.

### mySolarEdge app

This easy to use application, free for 25 years, runs on your mobile device and provides you with a realtime dashboard of your energy production and consumption. Your installer has their own application – the SolarEdge Monitoring Platform - which provides remote monitoring down to the panel level, easily identifying any under-performing panels. Compare this convenience with competitive systems where identifying a faulty panel can require a drone with an infrared thermal camera or a visit by the installer.

PV systems powered by the SolarEdge solution work together seamlessly to provide you with maximum power and efficiency while reducing your energy bills and dependency on your local utility grid.



"Conditions in an agricultural environment place high demands on solar panels and inverters." With the combination of Canadian Solar panels and SolarEdge, we provide agricultural companies with very high yield and safety."

Theo Hartgers, Zonnepanelen op de dak BV

For more information on how you can run your farm on sun, please contact us:

# **About SolarEdge**

SolarEdge is a global leader in smart energy. By deploying world-class engineering capabilities and a relentless focus on innovation, we create smart energy products and complete solutions that power our lives and drive future progress.









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