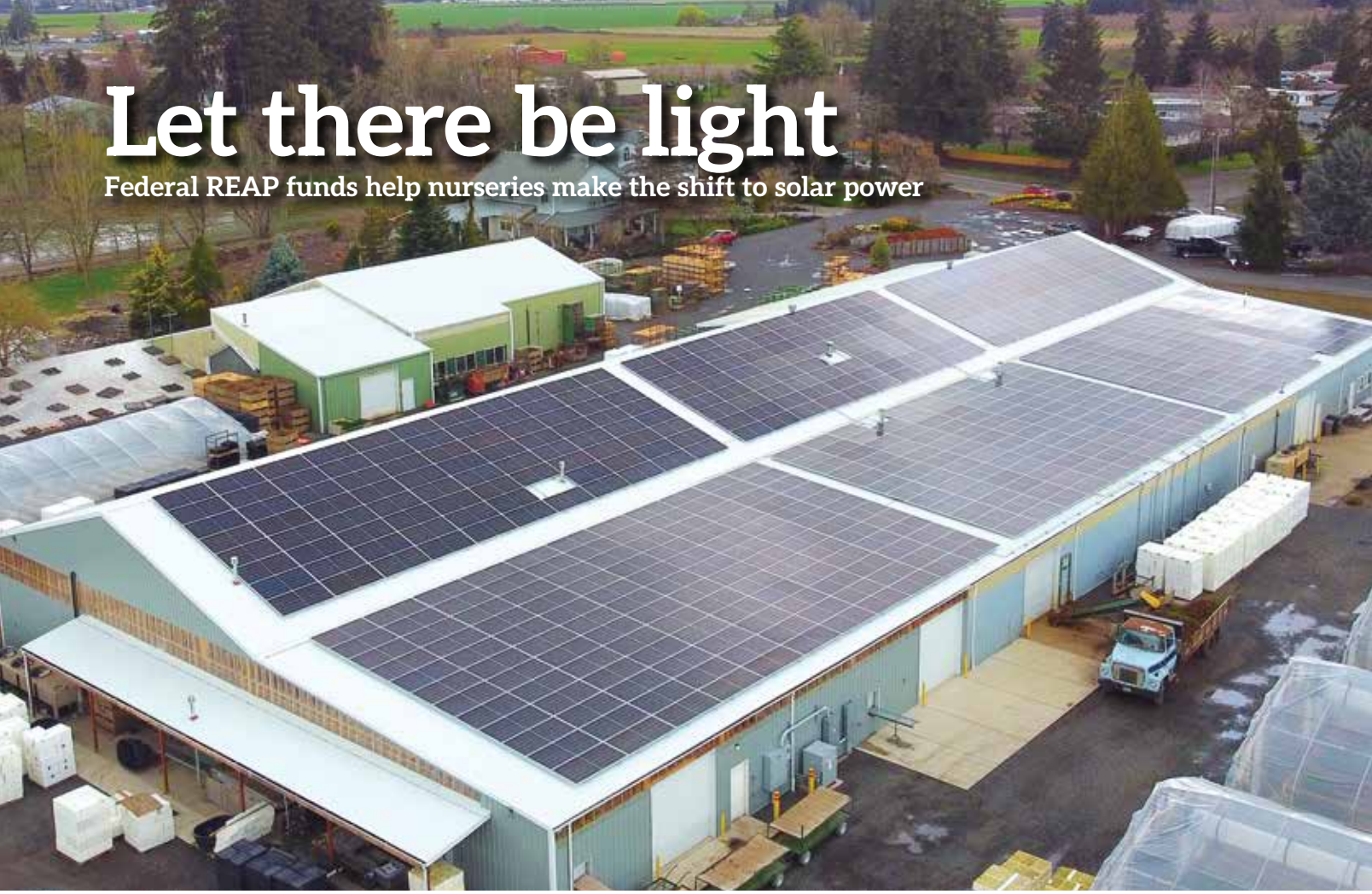
Let there be light

Federal REAP funds help nurseries make the shift to solar power



Brooks Tree Farms' system provides 100 percent of the electricity that the farm uses. PHOTO COURTESY OF PURE ENERGY GROUP

BY JON BELL

If you were to pay a visit to **Champoeg Nursery Inc.**, driving down its long, tree-lined driveway off Yergen Road in Aurora, Oregon, among the first things you *wouldn't* see would be the nursery's Quonset-style greenhouses, 2 acres of raised sand beds or 15,000 square feet of shade structures.

You might catch a glimpse of the nursery's adjacent hazelnut orchard, but really, the first thing you *would* see? An array of solar panels that powers most of the operation.

"That's the first thing you see when you drive in here," said Paul Stormo, owner of Champoeg Nursery, which has been growing a wide array — some 250 species — of native plants since 2002. "It's really good advertising for the kind of business we are. I think people appreciate that."

Champoeg installed its first solar array in 2013, motivated largely by the environmental benefits that come from using renewable energy. The system provides about 7,000 kilowatts, which at the time was enough to cover most of the nursery's needs. Over the years, however, Champoeg has grown, and it now has a much larger walk-in cooler, more heated workspace and other operations that require more power.

As a result, Champoeg is on the verge of installing an additional array that will provide another 22,000 kilowatts of electricity, saving the company an estimated $28,700 annually in energy costs.

And while the environmental benefits are still what drives Champoeg, there's another incentive that's helped pave the solar way: the USDA's Rural Energy for America Program (REAP). Launched in 2008, the program provides significant funding — in the form of guaranteed loans and grants — to agricultural producers and small rural businesses for investing in renewable energy projects like solar, wind and biomass. The program has funded tens of millions of dollars of renewable energy projects in Oregon and multiple billions around the country.

Stormo said Champoeg used REAP for its first installation, but the program, combined with other available tax credits, was even more appealing this time around.

"With the initial one, we were most interested in the environmental benefits," he said. "The financial incentives were just kind of a bonus. For this one, it's not that we don't support the environment as much — we still do — but the financial incentives were really good."

Uncertainty and impact

As of early March 2025, REAP, like many federal programs, was in a bit of an uncertain place. The new federal administration was still in the process of transitioning, which included stops and starts to various government programs.

Normally, applications for REAP funding are due at the end of March, September and December for the following fiscal year. In October 2024, the USDA announced that funding for REAP in 2025, 2026 and 2027 would total $200 million each year.

Whether anything with REAP gets changed or not remains to be seen. What is clear is that it has helped many nurseries, farms and small businesses in Oregon with beneficial renewable energy projects. Last year alone, nearly 40 projects in Oregon received $9.5 million in REAP funding. »

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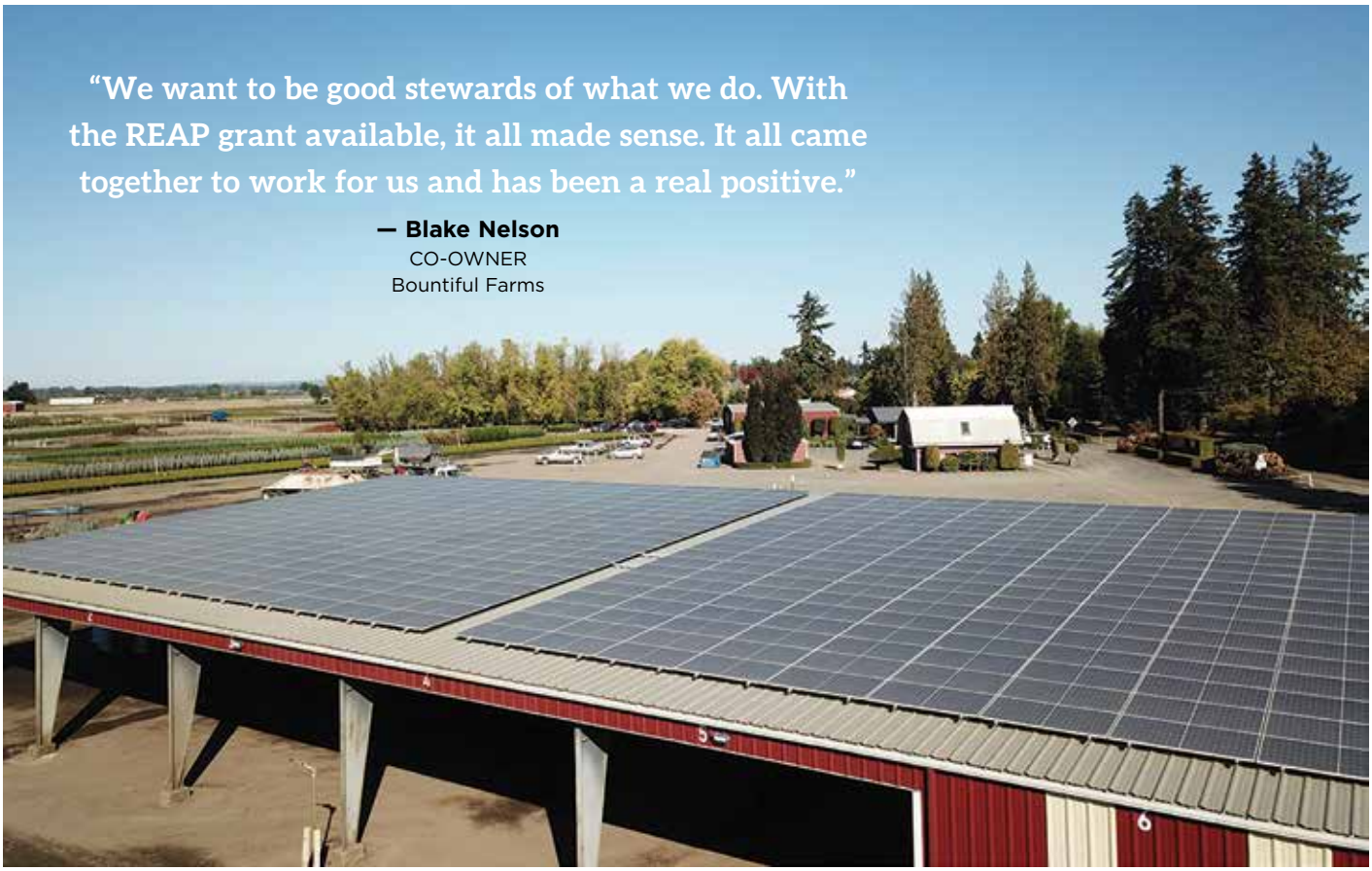

Bountiful Farms Nursery Inc. installed a 234-killowatt system on an existing building and will be installing a 228-killowatt one on a new building under construction. PHOTO COURTESY OF BOUNTIFUL FARMS NURSERY INC.

The funds don't cover the entire cost of a project; grants can cover up to 50%, guaranteed loans up to 75% and a combination of the two can also cover 75%.

Among some of the Oregon projects announced last year were about $561,000 for a 590-kilowatt solar array at **Bauman's Farm and Garden** in Gervais, roughly $449,000 for a 462-kilowatt array at **Bountiful Farms Nursery Inc.** in Woodburn and almost $317,000 for a 297-kilowatt solar installation at **Brooks Tree Farm** in Brooks.

"We just completed our system about the first of August," said Kathy LeCompte, who owns Brooks with her husband, Dave. "For us, it was a good business decision and ended up being a good deal."

Rays of light

LeCompte said Brooks' system, which was installed on an existing office and packing facility and is not visible, provides 100 percent of the electricity that the farm uses. The farm specializes in starter trees for Christmas tree growers, foresters and wetland restoration projects; its main electricity needs revolve around three large coolers and lighting.

Brooks runs on electricity from PGE, but its solar array sends the electricity it generates to the grid for use elsewhere, essentially offsetting the farm's electricity costs. If Brooks' array generates more energy than the farm uses each month, PGE provides credits that can be used toward future bills. That arrangement is known as net metering.

LeCompte said that in addition to the REAP funds, which covered about half the cost of the solar array, the system can be depreciated over a number of years, and additional tax credits help offset the cost even more over the long term.

"So between the credits and the grant and the ability to get the generation of the free solar power, it works out well," she said. LeCompte also noted that the solar panels have a 25-year warranty, though they do drop in efficiency somewhat over time.

Blake Nelson , co-owner of Bountiful Farms, said the REAP funds helped the nursery's plans for solar come together nicely. Rising PGE rates — more than 30% over the past five years — as well as an environmental sensibility had the company considering solar. They started looking into it, then heard about REAP and realized that their project — a 234-killowatt system and a 228-killowatt one — fit the bill.

"It was for sure for the environment," Nelson said. "We want to be good stewards of what we do. With the REAP grant available, it all made sense. It all came together to work for us and has been a real positive."

The first system has already been installed atop a large structure at Bountiful Farms; the second will be installed on the roof of another new building that's going up. The two systems should entirely offset Bountiful Farms' electricity usage.

"It's a positive symbol for the nursery when people come out and see it," Nelson said. "I don't know that it's really changed

how we do anything, but we like our power bill being lower."

Country Garden Nursery LLC, a hanging flower basket nursery in McMinnville, Oregon, for 35 years, started its long and winding solar journey back in 2016. Owner and designer Melissa McLaughlin said she worked with several different professionals to get a project going, but it wasn't until she connected with an instructor in the renewable energy technology program at Clackamas Community College in 2017 or 2018 that things started to move.

He helped create a plan for Country Garden and then connected McLaughlin with a company called Elemental Energy, a solar design and installation company in Portland. The process, including applying for the REAP grant, got bureaucratically bogged down a bit, but their 49.5-killowatt system went up and has been generating electricity for two years.

McLaughlin said the entire project cost about $115,000 and was covered by a mix of $5,000 from REAP, $50,000 in leftover COVID funds, $15,000 from an Energy Trust of Oregon rebate, $15,000 from the nursery and a generous tax credit. The system provides all the electricity to run the nursery and a home on the property, saving an average of $7,000 a year.

"Our timing worked out really positively to take advantage of a lot of different pockets of money to make it happen," McLaughlin said. "It's been great."

Power down, partner up

While many nurseries seem to be more than pleased with their solar installations — and the REAP funds that helped pay for them — there is at least one frustration a few of them have expressed. Despite having power-generating equipment at their operations, the way the system works doesn't allow them to use the electricity they're generating should the power go out.

That's not a negative check against REAP but against the reality that many solar arrays send all their electricity to the grid. For the nursery to use the power they generate would take a substantial

Melissa McLaughlin at Country Garden Nursery LLC tapped REAP, Energy Trust of Oregon rebates, and Covid funds to install the solar array. PHOTO COURTESY OF COUNTRY GARDENS NURSERY

investment in on-site batteries to store it.

"It seems to be a waste to have the energy production up on the building and not be able to access it," LeCompte said. "I've looked into it a couple times, and to even put in some basic batteries so we could run the office would be $50,000."

Technology may eventually evolve to bring that price down, but it's likely a few years off. Another option, according to Stormo at Champoeg, is to have a different kind of inverter in the system, one that's not solely tied to the grid. He said that kind, which will be part of Champoeg's system, will allow the nursery to tap into at least some of the solar electricity to keep the lights on and the Wi-Fi running.

One other area that many nurseries seem to agree on when it comes to going solar — and pursuing REAP funding — is to work with an experienced solar contractor to ensure it goes smoothly. Stormo said he partnered with a company called **Pure Energy Group** out of Jefferson, Oregon, on his new system.

"I think partnering up with a good contractor, someone with experience with the REAP program to help navigate the process, is really helpful," he said. "There is a lot of material to prepare, and I don't know if I would have had the time to do it all myself. We were really happy with who we chose."

LeCompte used Pure Energy Group as well, and was thankful for Rob Aldridge's help in handling paperwork, reminding her what she was responsible for to keep the project moving, keeping PGE responsive during the process and answering any questions she had. Aldridge is the REAP specialist at Pure Energy.

"I didn't have to chase the details, and when they staged some of their gear here, I didn't even know they were here," she said, noting the installation took just a few days. "Working with a contractor like that on a project like this and them taking care of us the way they did is what made it all so easy."

Jon Bell is an Oregon freelance journalist who writes about everything from Mt. Hood and craft beer to real estate and the great outdoors. His website is **JBellInk.com**.