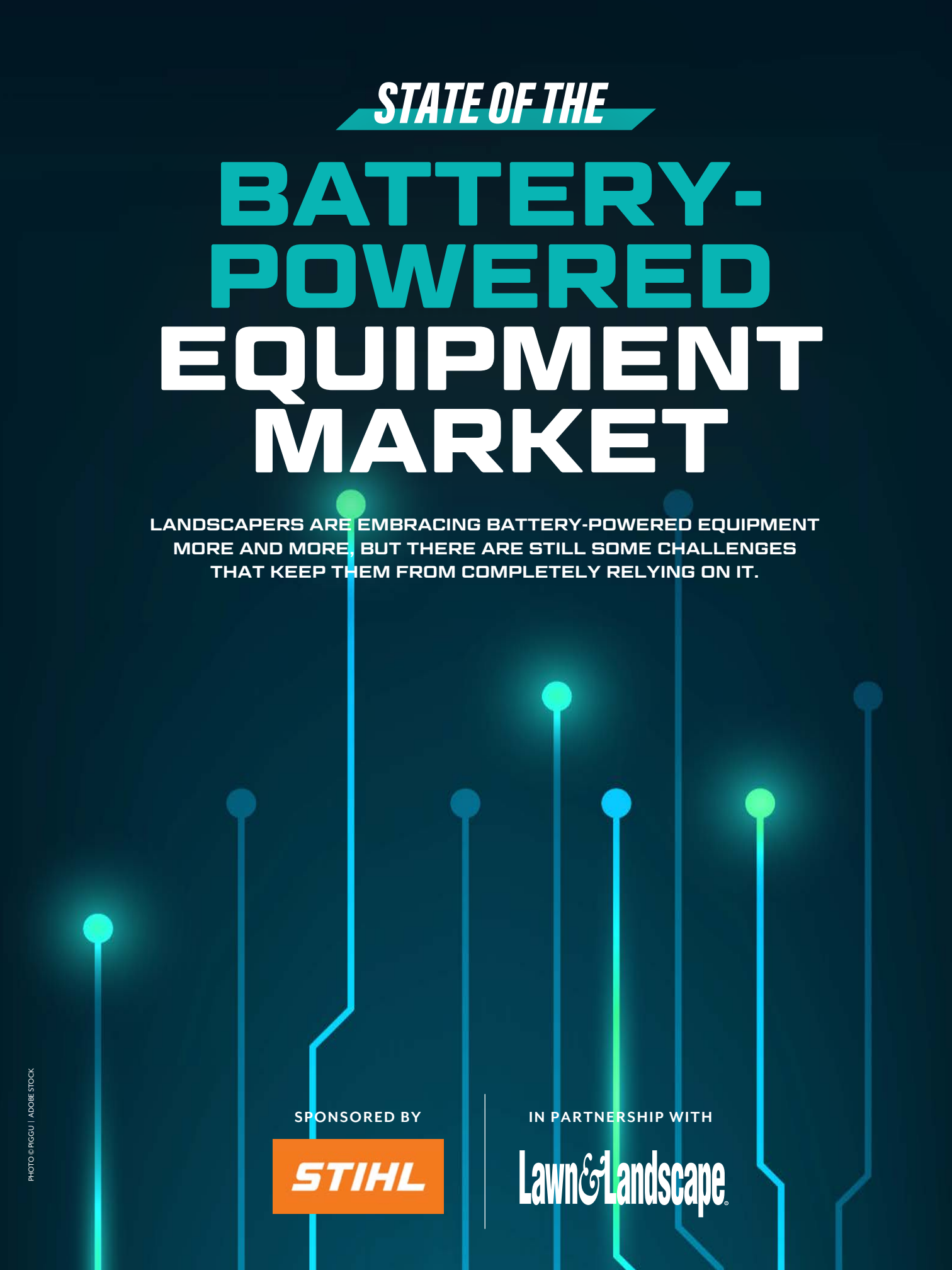
STATE OF THE BATTERY-POWERED EQUIPMENT MARKET

LANDSCAPERS ARE EMBRACING BATTERY-POWERED EQUIPMENT MORE AND MORE, BUT THERE ARE STILL SOME CHALLENGES THAT KEEP THEM FROM COMPLETELY RELYING ON IT.



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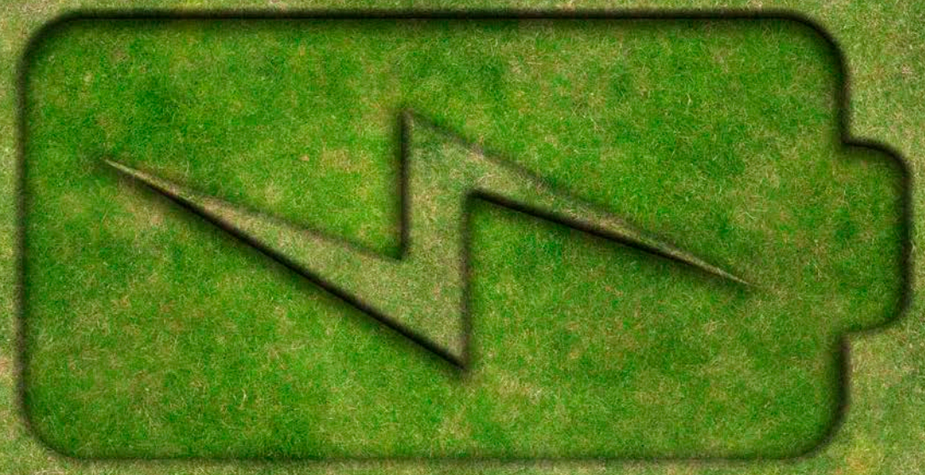
STATE OF THE BATTERY-POWERED EQUIPMENT MARKET



CHARGING UP

Battery-powered equipment continues to be embraced by the green industry.

By Kim Lux and Jimmy Miller

Note: This data was collected in mid-May of 2023 and the results are based off approximately 350 respondents. Not all percentages will equal 100% due to rounding.

What was your company's overall **gross revenue** for 2022?

35%	13%	7%	7%	21%	16%
Less than $200,000	$200,000-$499,000	$500,000-$749,000	$750,000-$999,000	$1 million - $6.9 million	$7 million or more

Anytime you tell your crews they're getting all-new equipment, it's bound to go well — at least that's Ryan McLennan's experience at Dennis' 7 Dees Landscaping.

As division manager of commercial services, McLennan recently ensured three maintenance crews switched to fully battery-powered equipment early this spring. The company plans to bring two more crews up to this speed annually until the whole company is operating on just electric equipment.

"Up until this year, we just had some handheld stuff that we were using on a couple crews for downtown Portland," McLennan says. "We were just trying to reduce noise."

These efforts included battery-powered blowers, trimmers and head shears, but the biggest move still awaited in battery-powered mowers. McLennan says the company seemingly demoed everything on the market and was ultimately impressed with how far along their mower brand's technology was in terms of development. The company offered a smart trailer design where everything was wired within the trailer, converting it into a charging station itself.

McLennan says the company has a few 48-inch mowers and 60-inch mowers in its lineup. Additionally, they added some charging stations in their yard that operators can back into at the end of each day, thus replenishing the trailers' power for the next day's work.

"You just need to make sure everything's charging and then you head home," he says.

He anticipated some pushback from employees on the equipment, but McLennan says the excitement behind using all-new tools overshadowed any skepticism about the battery-powered tech. Plus, the crews were accustomed to using some handhelds periodically and had been a part of the demoing process for the mowers.

"We ran into a lot less resistance than we thought we were going to," McLennan says. "It wasn't a big surprise to anybody though — they knew it was coming."

Of course, it also helped that their planning process was thorough. McLennan advises anybody making a push for battery-powered equipment to make sure they really know what they're buying and what they might need in terms of infrastructure to support a switch from gas.

On properties with tall grass for instance, especially after some hefty rainstorms swept through the area, they had to go back to properties because the juice wore out before the job was done. But McLennan says it's wise to hang on to your gas-powered equipment as a backup if and when batteries die early.

One thing he warns specifically about is making sure landscapers know how important those batteries are. Losing or damaging those batteries can mean costly replacements that might sink the whole ROI.

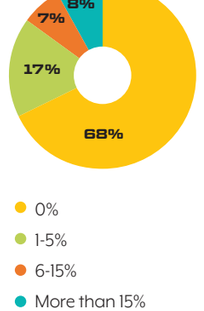
"So much of the value of the equipment is in the batteries," McLennan says. "If your trailers are in a place where they can get broken into or you're in a place where you could have some internal theft… you're opening yourself up for some major losses."

McLennan says they based which crews might try electric first based on which ones work with customers that might value it the most. Plus, he says, it helps to pick crews that work with properties that are remarkably visible like some of the commercial properties Dennis' 7 Dees services out west.

Ultimately, McLennan thinks the company will see a continued ROI as they break down how much money they're saving on fuel and downtime on machines when they need repaired for a blown belt or oil changes. The plan to work all 12 crews into fully electric will mean a steady change for the company, not a sudden one.

"That's going to be market-driven, revenue-driven," he says. "It's a pretty significant expense to add that many machines year over year over year."

What **percentage of your customers have requested crews** that use battery-powered equipment?



What are the barriers to increasing your use of **battery-powered/electric commercial equipment**?
Check all that apply.

72% Run time is too short.

63% Equipment/battery are too expensive.

62% Recharging the equipment takes too long.

45% Not enough power

20% Don't think they are environmentally-friendly

10% I don't know how to perform maintenance or how to find a mechanic to service them.

5% I'm not familiar with them.

3% Hassle of training the crew how to use.

2% I don't know where to get the equipment.

OPPOSITE PAGE PHOTO © FATIDO | ISTOCKPHOTO.COM

STATE OF THE BATTERY-POWERED EQUIPMENT MARKET

What **battery-powered/electric equipment do you use** at your landscaping or lawn care company?
Check all that apply.

61%
Blower

52%
Hedge trimmer

49%
Edger/string trimmer

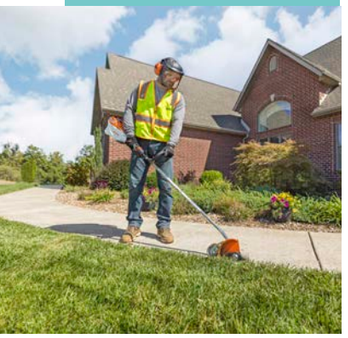
40%
Chainsaw

24%
Sprayer/spreader

23%
Riding/walk-behind/ stand-on Mower

8%
Autonomous mower

5%
Vehicles



SUSTAINABLE COMMITMENT

BURT DEMARCHE IS PUTTING HIS MONEY where his mouth is, especially when it comes to sustainability.

DeMarche, the founder and president of LaurelRock in Connecticut, just received his first battery-powered, standup 52-inch standup mowers. They cost $33,000 apiece, which is still a significant financial investment despite the fact it's equipment that's starting to really catch on.

"We're paying literally three times what we would for a battery-powered than we would a gas-powered," DeMarche says. "Hopefully that will come down soon, but we're committed to sustainability. We're putting the investment behind our words there."

He says the company's goal is to lead the charge for the local green industry in terms of eco-friendly equipment. It's been a decision five years in the making. DeMarche's 45 employees out on the construction or maintenance crews may one day be fully outfitted with electric equipment, though only one crew is currently solely operating on batteries. All maintenance crews do have a battery-powered, 21-inch push mower, battery blowers and battery line trimmers, all of which DeMarche says finally arrived after more than a year after ordering.

"That was a very frustrating wait," DeMarche admits.

Still, the desire to curb noise and air pollution stayed strong. DeMarche believes battery-powered equipment allows for a much cleaner way to do the work landscapers do.

"We have the potential to influence the planet in a positive way," he says.

Early feedback on some of the adopted battery equipment like blowers and trimmers was positive from clients. Some would go out of their way to say, "it's nice how quiet your team is," and one client went as far to bring LaurelRock to a board of multi-million property owners from one of their high-end residential accounts. She had overheard the equipment through an open window and wanted to compliment the team on their effectiveness, and DeMarche wanted to carry that positive momentum into mowing. He gets to soon explain how they're doing the job with battery equipment and why they made the switch.

"We're going to really quickly pick up some clients there, I think," DeMarche says.

The timing on this movement toward battery-powered equipment is impeccable because DeMarche says local municipalities and cities are trying to pass some noise-related regulations on gas equipment.

"Nothing's passed yet, but it's still nice because we feel we're at the forefront of that," he says.

Despite all of that, it hasn't all been perfect for DeMarche's team. He says they had to upgrade their power supply and budget for the more expensive equipment. DeMarche also says batteries don't often last quite as long as manufacturers claim, so anyone looking to buy should preplan around that.

"It's not perfect," DeMarche says. "It'd be great if the batteries could be longer lasting. Beware that if they say it'll last 3.5 hours, it might only last an hour and a half."

Are you aware of **any existing or developing efforts to ban gas equipment** in your community or state?

YES
41%

NO
59%

Are you aware of **any hour restrictions when using gas equipment** in your state or community?

YES
40%

NO
60%

PHOTO COURTESY OF STIHL

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FRIENDLY ALTERNATIVE

WHILE TRAVELING OUT WEST, DARREL TEMPLETON, co-owner of The Green Guys Eco Friendly Lawn Care, thought of his next business venture — eco-friendly, electric lawn care and maintenance on the East Coast and in his home state.

"We didn't really have any of those here in Virginia," he says. "So, we started out with just a Prius carrying a battery-powered push mower and now we're at a two-truck setup with zero-turns and all that. We've built up from very little to where we are now."

The business was started during the COVID-19 pandemic by Templeton and Chris Swartz. They are now up to five employees and looking to do $300,000 in revenue in 2023.

Templeton says Green Guys uses battery-powered equipment wherever possible.

"The main reason for going battery-powered was wanting to be able to offer eco-friendly alternatives," he says. "We still have some gas engines for specific yards where we wouldn't be able to do them without."

And while it's great market differentiation, Templeton says not all customers are focused on sustainability.

"I'd say one in six customers actually care at all about our eco-friendly angle," he says. "It's a lot smaller than we thought. I'm still happy I started the business the way I did."

However, for those who are committed to lowering emissions and insist on fully electric services, Templeton says it's reflected in the price.

"Some customers insist on going full electric, which means sometimes we have to push mow something that really shouldn't be push mowed," he says. "In that case, they are paying a lot more. In general, our prices are quite a bit higher than our competitors in our area."

One advantage to the equipment that Templeton says has been a gamechanger is less time in the shop dealing with repairs and regular maintenance.

"The amount of maintenance needed on small engines is ridiculous. The battery-powered tools require no maintenance whatsoever, which is awesome," he says. "The low maintenance is the No. 1 thing for me. Not having to do oil changes and all that is great. You still have to sharpen blades and do your basic stuff like that."

Templeton adds the thing his customers love the most about the battery-powered equipment is the low volume.

"The noise reduction is huge, too," he says. "I'm not a huge fan of loud noises and it's been nice not having to deal with the smell of gas. Our customers seem to like it more too. We have quite a few customers that are not eco-conscious whatsoever, but they really like the noise reduction and not having big, loud blowers blowing next to their windows."

Regardless of the battery-powered equipment being much quieter, Templeton says his crews can't start any earlier as they need to let the morning dew dissipate.

"Other lawn crews are getting up with the sun and getting started at like 6:30 a.m. and we can't do that. We have to get started at 9 a.m. on account of any sort of moisture or dew will kill the batteries exponentially faster," Templeton says.

In order for the equipment to keep its charge all day, Templeton says they have to be extra mindful of conditions like that.

"If we start mowing and it's a dewy situation, then we'll have killed our batteries and that will mess up the whole workflow of the day," he says. "You have to be moisture conscious, which is definitely different than running with gas engines when you can go wherever, whenever."

Despite these obstacles, Templeton says he is eager to continue using battery-powered equipment and is excited about the advancements on the horizon — especially as more brands roll out their products.

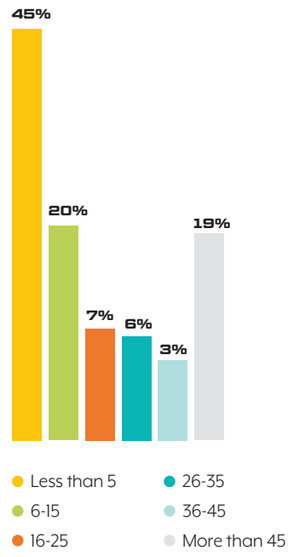
"I'm excited most for some of the big dogs to get invested in this," he says. "A lot of the bigger companies have been holding back and waiting and seeing how the market will play out before coming in. I'm excited for a good, even spread on competition and some good ole' capitalism to step in."

Are you currently using **battery-powered equipment**?

YES **66%**

NO **34%**

How many employees do you have?



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THE NEXT STEP

AT PRECISION LANDSCAPE MANAGEMENT, the company is making moves to bolster its commitment to battery-powered equipment.

"Our company goal is to have at least 50% of our handheld equipment be battery-powered by the end of next year," says Nate Moses, founder and CEO of Precision Landscape Management. "We continue to lean in that direction and have that be a focus for us."

Moses, who is president of the 75-employee company, says they began purchasing handheld battery-powered equipment about two years ago.

"I try to be a forward thinker and as battery technology started to become more popular and I saw some of the major name brands really lean into it, I decided it was time to sample it and see how it works for us," he says.

The business, which is projected to reach $8 million this year, is aiming to get out ahead of the inevitable bans and restrictions on gas-powered equipment.

"We are privileged to not have any mandates or deadlines like in New York City or California where they have to make this transition. Their hands are tied. We have the choice to do it and can be ahead of competitors in our market who will hold out and wait until the last minute," Moses says.

Moses says another purpose behind the battery-powered transition is curbing fuel costs.

"Some of the initial attractions were not having ongoing fuel costs and no unstable fuel expenses," he says. "Once you purchase the batteries you obviously have to charge them, but there's not the ongoing hassle of fuel, mixing fuel and making sure you have enough fuel.

"The quietness of the equipment also played a factor and some of them tend to be a little bit safer to use as well," Moses adds. "We prioritize safety. One of our core values at the company is culture of safety, so we're just trying to make sure that we back up what we say."

Moses says buying batteries has proven to be a more economical decision.

"We just now, two years in, had our first battery that went bad," he says. "Two years in and we have 20 or 30 pieces of equipment and maybe 20 batteries. To just now have one go bad isn't too bad at all."

However, despite the longevity of the batteries, Moses says there are still some concerns about how to repair the equipment.

"With repairing battery-powered equipment, there are still a lot of unknowns about that," he says. "Fortunately, we haven't had too many issues yet but that is a concern for us. Our mechanic isn't as familiar with it, so he's trying to learn about it but there isn't a lot of information out there as far as serving battery-powered equipment goes."

Moses adds there are concerns about the power of the equipment too, and that's why Precision still utilizes some gas-powered equipment.

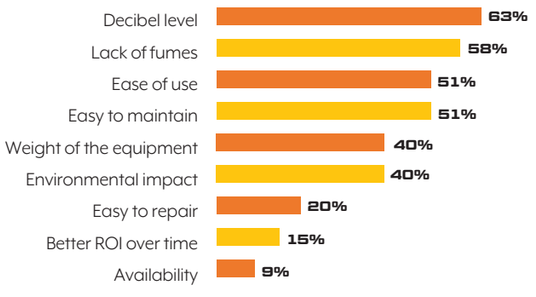
"What we've noticed is that for certain pieces of equipment, the battery-powered stuff just isn't quite powerful enough yet," he says. "Primarily in the fall with leaf blowers, the gas-powered blowers are much more powerful, so we continue to use those for most instances."

Though, Moses notes the battery-powered equipment has come a long way since it was first introduced to the industry.

"The durability and reliability has gotten a lot better," he says. "There wasn't much market confidence at first. That has definitely gotten a lot better these last few years. ■

What do you see as **positive aspects** of battery-powered/electric equipment?

Check all that apply.



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