Utility Vehicles Slowly Take Eco-Friendly Route

Gas-powered engines still reign, but manufacturers are moving toward electricity for a variety of reasons

BY THOMAS SKERNIVITZ, MANAGING EDITOR



t The Toro Co., protecting the environment is "our largest priority today," according to the director of the company's Center for Advanced Turf Technology. "I've got more of my people and more money working on this



general area of environmentally friendly alternative fuels than any other project," Dana R. Lonn says. "It's important to us. We think it's an important thing to our future, and it's something that will play out over the next two to 10 years."

Not that there aren't obstacles. Foremost, there has to be demand, and right now the golf course customer isn't exactly antsy to replace gas- and diesel-powered equipment. And throughout most of the country, there's no one twisting the superintendent's arm to make the switch.

"If what we do is implement something, and then customers say, 'Oh, that's really nice, but I'm going to buy the diesel one,' that isn't very motivating for us," Lonn says. "Ultimately, we need customers that want these kind of products."

Three things could spur interest, according to Lonn:

► Laws — Automakers began installing catalytic converters on cars in 1975 because the government made it the law. As for similar mandates in the green industry, "We're probably a ways away from that," Lonn says, "although it's evolving."

► Governmental pressure and incentive — Evolution is evident in New York, where state employees, per executive order of Gov. George Pataki, are required to limit their emissions by using alternative fuels.

"New York's a big buyer. New York, in doing this, means business," Lonn says. "Obviously, if New York was the only one in the world that was doing this, we wouldn't worry too much about it. But we believe they're on the leading edge of a trend that will continue, as opposed to a bunch of goofballs out on their own."

▶ Fringe benefits — With no laws or outside pressure to force the issue, the best way to attract the customer, Lonn says, is to attach eye-catching attributes to eco-friendly equipment. It's really not a big deal, Toro believes, if customers have ulterior motives — the desire for reduced noise, low maintenance, better control, easier diagnosis — behind the purchase of alternative fuel equipment.

"Customers are starting to ask more for the attributes than they are the actual products," Lonn says. "So you kind of get the best of both worlds — better products that happen to have better emissions. That's what is motivating us to put quite a bit of money into them today, because we think we can make products every bit as good and with lower emissions."

The majority of golf cars as well as a good number of light- and mid-duty utility vehicles are already powered by battery. Again, however, the switch from gas isn't necessarily environmentally motivated.

"The lighter-duty utility vehicles have evolved from gas because they're cheaper to operate and require a lot less maintenance," Lonn says. "(Environment) in most parts of the country is the third factor."

Cost will continue to be a concern as fuel prices continue to rise, although the environmental factor should not be forgotten, according to Mike Packer, the vice president of utility vehicle and international sales for Club Car. "In some of the lighter-duty products we see today, electric product is certainly beginning to make sense," Packard says. "Environmentally, it's the right thing to do when you can. You do have fuel prices continuing to creep up, so if there are opportunities to decrease fuel consumption, it's certainly a way to go."

The superintendent's biggest com-

plaint against electric vehicles has always been a perceived lack of power and range. In many cases, it's not so much perception as first-hand experiences with second-hand golf cars.

"By the time those products are handed down, they may be a little tired anyway," Packer says. "It really gives the electric *Continued on page 52*



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vehicle a bad name because you may have a product that has a couple of cells that are weak, and they're not going to hold a charge. And quite honestly a golf car power train is not well suited for a mid-duty type cycle on a golf course that a superintendent would subject a vehicle to."

If heavy-duty utility vehicles are to be successfully powered by batteries, hybrids or fuel cells, they likely will have to follow in the tracks of mowers, Lonn says.

"The utility vehicle runs less than two hours a day. There really isn't any mowing machine out for less than two hours," Lonn says. "But on the other hand, what we're doing is not exclusive to mowing machines. Traction drives and hybrids and fuel cells can really be applied to any product. It's really a matter of deciding which one makes sense to do first."

In addition, utility vehicles, fair or not, are considered "second-tier products," Lonn says, when compared to mowers. "They're the kinds of things you need to do your job, but your greens committee and the golfer couldn't care less what vehicle you got," Lonn says. "They're worried about what the greens look like or what the fairway looks like."

In August, Club Car released an electric-powered utility vehicle that it considers anything but lower tier. Powered by eight six-volt batteries rather than six eight-volt batteries, the vehicle provides a best-in-class top speed of 17 mph and a category-leading useful range. The vehicle also has a weight capacity of 1,200 to 1,500 pounds.

"In my opinion ... this electric (mid-duty) vehicle will do everything that a gas vehicle can do," Packer says. "The primary difference is that you could still run a vehicle out of power at the end of a day if you're working it real hard. So, is it for 100 percent of the population? I would say no. But we're to the point where 75 to 80 per-



Mowers are already operating on electric power, as Toro's Dana R. Lonn explains. cent of the population should have a very good reason to look at this product."

As for that necessary demand to inspire research and development, Packer says it's coming.

"The market will continue to look electric once it understands there are viable electric options out there that will give them the performance and reliability that they are looking for and have become accustomed to with gasoline products," he says.



