



Our Commitment to Responsible Environmental Practices



At The Toro Company, we are committed to the well-being of our customers and the communities where we live and work through market-leading innovation that enhances the health of the ecosystems around us. Our committed focus has generated creative solutions to help our customers be more productive, improve fuel and energy efficiency, more precisely apply water, resources and other inputs, and better care for their outdoor environments. Equally important, we continually strive to improve the environmental footprint of our global operations by reducing water usage, waste and energy use where possible. All of these activities provide for a healthier ecosystem that in turn provides for better human well-being, while enriching the beauty, productivity and sustainability of the land.

Product Innovation

Throughout our history, using innovation to solve real customer problems has been a hallmark of our success. With a focus on efficiency and reduced total cost of ownership, our current offering includes products powered by propane, biodiesel and advanced batteries – made more efficient by incorporating electronic fuel injection, hybrid and electric technologies. Other product benefits include GPS-supported technologies to apply resources and other inputs more precisely, and highly efficient LED solutions for professional lighting. These innovations help to provide better functioning landscapes and ecosystems, while reducing resource use.



Golf / Grounds

- Toro's innovative GeoLink® system for Multi Pro® sprayers incorporates GPS technology and individual nozzle control to help golf course and grounds professionals achieve a more precise, repeatable and consistent spray coverage, eliminating overspray and gaps, and significantly reducing overall application costs.
- In 2017, Toro announced a partnership with Virginia Polytechnic Institute and State University (Virginia Tech) to support research efforts in GPS sprayer technology to benefit turf maintenance practices. With use of Toro's Multi Pro 5800 with GeoLink, we are working to minimize the amount of inputs applied to a site by accurately mapping the location of problems and treating only the affected areas.

Combining these unique tools helps us to meet customer needs, while optimizing the inputs of labor, resources and capital.

- In 2015, Toro introduced the industry's first fairway mower with a true hybrid drive system. With exclusive PowerMatch™ technology, the Reelmaster® 5010-H delivers power when and where it's needed. Utilizing a motor generator and battery pack, in conjunction with a Tier 4 Final certified low-emission diesel engine, the mower boasts an average fuel savings of 20 percent when compared to conventional fairway mowers, and additional fuel savings when operated in economy mode.



- The Toro® Greensmaster® eFlex™, the industry's first lithium-ion battery-powered walk greens mower, is now manicuring greens and sports fields at championship venues around the world. Customers and bystanders appreciate the quieter operation, and the fact that the eFlex can mow up to nine greens on a single charge.
- Toro's Greensmaster® TriFlex® Hybrid riding greens mower features an all-electric reel drive system, reducing the consumption of hydraulic oil.
- With a focus on innovation and environmental responsibility, Toro's EnergySmart® label ensures confidence in the efficient utilization of fuel and labor – and providing sustainability improvements for customers.

- Toro's innovative Smart Power® mower technology automatically transfers power where it's needed to prevent bogging down in heavy cutting conditions, while maintaining optimum blade speed for a superior quality of cut.

Residential / Commercial

- Several Toro® and Exmark® commercial mowers incorporate closed-loop Electronic Fuel Injection (EFI) systems to offer significant benefits in improved startability, stronger performance, and dramatically reduced fuel consumption. In some cases, commercial landscapers who have adopted EFI technology have documented up to 25 percent less fuel usage than comparable carbureted engines.
- Toro's Horizon™ technology on select Z Master® models, and Exmark's patented RED technology on select Lazer Z® models, provides onboard intelligence to control mower power and efficiency with defined performance modes. Coupled with EFI and E-governor technologies, Horizon and RED-equipped models can use up to 40 percent less fuel than their carbureted counterparts.



- Incorporating the latest in LED technology, the innovative *FLEX GOLD™* Series LED lamps from Unique Lighting Systems® can reduce energy usage by up to 85 percent compared to halogen lamps.

- Rivaling the power and performance of gas-powered models, Toro's all-new PowerPlex® family of 40V lithium ion battery-powered handheld tools features a versatile system that allows homeowners to easily switch from task to task with the same interchangeable battery pack. The line includes a debris blower, chainsaw, 24-inch hedge trimmer, 13-inch string trimmer/edger, and 14-inch string trimmer.



- Toro® and Exmark® propane-powered professional mowing equipment not only help reduce emissions but also provide increased fuel efficiency for extended runtimes and create a lower cost of ownership over the life of the machine.
- Toro and Exmark were first in the turf industry to approve B20 biodiesel fuel for most commercial and landscape contractor equipment.
- Our proprietary Recycler® cutting system mulches grass clippings into fine particles to return vital nutrients and moisture back to the soil, helping reduce yard waste sent to landfills and fertilizer usage.



Irrigation Efficiency

Limitations in water quantity and quality are two of the greatest challenges we face globally today. We understand the importance of water in creating functional landscapes and recreation areas, as well as producing food and other crops. Therefore, we strive to innovate industry-leading irrigation solutions that apply water more efficiently to turf, landscapes and agricultural crops. We collaborate with universities, industries and communities to further education and awareness around proper irrigation strategies for enhancing and protecting our ecosystems. In addition, we provide product and financial resources to help non-profits, consumers and businesses realize the environmental and economic benefits of water efficiency.



Golf / Grounds

- In 2018, The Toro Company entered into a strategic equity investment with GreenSight Agronomics, a leader in automated drone sensing technology for the turfgrass and agricultural markets. For golf course professionals, the system provides thermal mapping and detection analytics to improve turf health with less water, and reduced fertilizer and pesticide use.
- Taking irrigation efficiency to the next level, Toro's comprehensive Lynx® Central Control System combines access to real-time course information, precision control options, and convenience through mobile connectivity to better manage turf health and water resources. Expanded capabilities through the new Lynx Smart Hub, Lynx Smart Satellite and Lynx Dash provide even greater functionality and control.

- Advanced solutions in site assessment, like Toro's new PrecisionSense™ technology, measure the variability of key site attributes – including soil moisture, salinity, compaction and plant performance – to help customers improve water and resource efficiency, and produce healthy, more uniform turf.
- Toro's Turf Guard® wireless soil monitoring system measures and reports soil moisture, temperature and salinity. The real-time data helps customers make more informed decisions on when and how much to water, ensuring healthier turf without over or under watering.



Residential / Commercial

- Toro was recognized by the U.S. Environmental Protection Agency with the 2017 WaterSense® Excellence Award for efforts in outdoor water efficiency and education. This was the third consecutive year that Toro received a prestigious WaterSense award. Over the past decade, Toro and nearly 2,000 other WaterSense partners have helped consumers save more than 2.1 trillion gallons of water.
- The award-winning Toro® EVOLUTION® irrigation controller provides the perfect balance of simplicity and sophistication with its intuitive interface, USB functionality for future water-saving upgrades, and smart control. Wireless connectivity to Toro weather and soil moisture sensors enables each irrigation program to be controlled independently and automatically adjusted based on weather or soil conditions. Further, the SMRT Logic and SMRTscape platform allows EVOLUTION users to manage and control their irrigation from anywhere through a smartphone, tablet or computer.



- Leveraging Toro's innovative Turf Guard® wireless soil sensing technology used on golf courses and sports fields, the award-winning Precision™ Soil Sensor helps homeowners maximize irrigation efficiency by preventing scheduled irrigation cycles from running when sufficient moisture is already in the soil.
- Toro's patented and award-winning Precision™ Series Spray Nozzles and Precision™ Series Rotating Nozzles easily retrofit to existing irrigation systems comprised of all major brands. Both nozzle families apply water slower and more evenly than competing nozzles to help eliminate runoff and deliver up to 30% savings in outdoor water use.

- Introduced in 2015 and sponsored by The Toro Company, The Water Zone weekly radio show brings together local, state, federal and international officials, water experts, civic leaders and technologists to discuss today's water challenges and explore strategies for sustaining one of our most precious resources. In 2017, the Irrigation Association announced a partnership with The Water Zone to provide on-air educational training for irrigation and landscape professionals.
- With a focus on providing sustainable solutions in water management, Toro's Irrigation Business received the 2014 "Sustainable Design and Innovation Award" from the City of Riverside (California). Presented to companies that exemplify excellence in green building standards, Toro was recognized for its efforts in optimizing energy usage, conserving water resources, and using environmentally preferable products in site design.
- In 2009, Toro became a founding partner of the Certified Water Manager Program. Created and managed by the California Landscape Contractors Association (CLCA), this is the first and only "performance based" certification program for water management in the country. The program provides the training and tools to enable irrigation contractors to manage landscape sites to water budgets set by California's Model Water Efficient Landscape Ordinance.



Agriculture

- Toro's award-winning drip irrigation recycling service is a result of an ongoing commitment to helping farmers maximize crop production with efficient and sustainable irrigation practices, including the recycling of spent drip irrigation tapes and driplines. The service, in partnership with Revolution Plastics, uses the recycled materials to make plastic can liners, and other agriculture and construction sheeting, rather than sending the used materials to a landfill.



- In support of the Western Growers Foundation and its school garden program, Toro has donated over 350 drip irrigation kits to schools in California and Arizona to help teach children the value of agriculture, growing vegetables and produce, and healthy diets.
- In partnership with government agencies and NGOs, Toro is helping smallholder farmers in developing countries adopt drip irrigation as a tool to improve food security, nutrition and economic development.

- For decades, Toro's Blue Stripe® hose and Aqua-Traxx® drip tape have been trusted by farmers and nurseries worldwide to help increase water use efficiency and crop yields. Blue Stripe and Aqua-Traxx, along with our more recent BlueLine® PC heavy-wall dripline and FlowControl® premium drip tape, greatly improve water use efficiency by evenly applying water slowly and directly to the crop's root zone. As a result, crop yields, quality and resource use efficiency are improved, environmental degradation avoided, and water waste minimized.

- Toro has published a library of drip irrigation educational material at www.driptips.toro.com, including the award-winning Toro Ag Owner's Manual and Solutions Brochures for fruit, nut, vegetable and row crop applications – in addition to recorded webinars and podcasts available on iTunes from *The Water Zone* radio show.



- Toro Ag is a leader and active member of many organizations supporting efficient irrigation, including the California Ag Irrigation Association (CAIA), the California Irrigation Institute (CII), the Irrigation Association (IA), the American Society of Agricultural and Biological Engineers (ASABE), and the American Society of Agronomy (ASA) among others.

- Helping growers identify the best system design for optimal water and resource use efficiency, Toro's AquaFlow Design Software reports the predicted emission uniformity of a proposed drip irrigation system design, as a result of user selected laterals, submains, mainlines and flushing parameters.

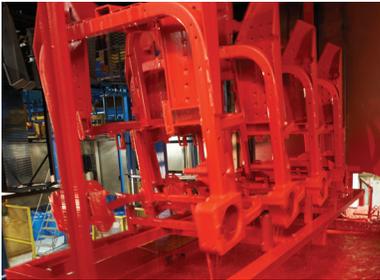
- Toro's *Drip Irrigation Payback Wizard* helps growers and industry professionals immediately view predicted cost savings and revenue benefits associated with the conversion from flood or center-pivot sprinkler irrigation to high-efficiency drip irrigation technology using actual cost and revenue data from crops throughout the United States.



Operational Efficiency

The Toro Company continually seeks to improve its energy efficiency and reduce the environmental footprint of its global manufacturing facilities. We have implemented environmental, health and safety management systems at our facilities. We also engage in periodic external audits to assure compliance with all national, regional and local environmental requirements – in addition to reducing water usage, waste and energy where possible.

- The company's Tomah, Wisconsin, manufacturing facility, which produces professional equipment sold worldwide, is registered as ISO 14001:2004 compliant. This requires integration of environmental protections and compliance into all aspects of the business to ensure continuous improvement.



- Our irrigation testing facility in Riverside, CA, includes a closed-loop system that utilizes filtered, recycled water to minimize overall water and energy consumption.
- The Toro Company installed exhaust-scrubbing equipment to reduce carbon monoxide and other contaminants by more than 90 percent at its engineering test facility in Bloomington, Minnesota.
- The company's global manufacturing facilities further reduce environmental impacts by:



- Recycling steel, aluminum, plastics, cardboard packaging and paper.
 - Recovering and reusing powder (paint) coating.
 - Recycling water used in production through a wastewater treatment system.
 - Replacing certain cleaning systems with new systems for reduced energy and water requirements.
 - Replacing inefficient lighting fixtures to reduce our energy usage and carbon footprint.
- Recycle and reuse 90+ percent of plastic scrap generated by manufacturing drip irrigation products by recovering and reusing them in our processes.
 - The company has implemented a rainwater collection and redistribution system at its facility in Adelaide, Australia, to irrigate the grounds.
 - Where feasible, Toro transports product components from suppliers to our facilities in reusable or recyclable packaging.

Community

By collectively leveraging the expertise and resources of The Toro Company and our business partners around the world, we believe we are uniquely positioned to meaningfully advance the interests of both our customers and the industries we serve. Specifically, we focus on supporting projects to beautify and preserve outdoor environments, advance water conservation efforts, and promote enjoyment through outdoor physical activities. We believe we can also make a difference through access and education in specific areas where our brands, expertise and products matter.



Environment

- With water conservation being a significant global issue, The Toro Company's strategic partnership with the Wyland Foundation aims to raise environmental awareness about the importance of protecting water resources for future generations and preserving the world's oceans, waterways and marine life.
- In 2017, The Toro Company introduced the *Toro Urban Park Innovation Award* to recognize the vital role parks play in bringing communities together through recreation and arts, and showcase advances in innovation, design and management practices. The award was presented in partnership with the City Parks Alliance, whose mission is to support the creation, revitalization and sustainability of parks and green spaces that contribute to more vibrant and equitable cities.

- The Toro Company is a longtime partner of the Environmental Institute for Golf (EIFG), the philanthropic arm of the Golf Course Superintendents Association of America (GCSAA), donating more than \$2 million to help support scientific research, education and scholarships for future turfgrass professionals. One of our most recent initiatives is an exclusive partnership with EIFG's 'Rounds 4 Research' specifically aimed at increasing funding for turfgrass research across the United States.
- The Toro Company continues its support in helping advance sustainability in and through the game of golf, and is a premier corporate partner of the Golf Environment Organization (GEO), which is dedicated to helping the global golf community establish leadership in environmental enhancement, resource efficiency and community value.



Education

- For many years, Toro has invested in academic and technical agronomic programs to help further the education of future turf management professionals. These commitments include scholarships, product support, and collaboration with students and faculty to advance the industry and improve efficiency in resource management.



- Working in conjunction with the Irrigation Foundation, the National Association of Landscape Professionals (NALP) and the Landscape Architecture Foundation, we provide scholarships and opportunities for future professionals to attend key industry tradeshow to further their education, develop professional contacts, and gain valuable experience in their core fields.
- Helping students develop leadership, and achieve personal growth and career success through agricultural education, The Toro Company proudly supports FFA with grant funds for their Supervised Agricultural Experience and recognizes outstanding achievement by sponsoring the Diversified Horticulture Award.

Access

- Toro has served as preferred supplier of turf equipment and irrigation to The First Tee since its founding in 1998, and supported the organization's mission to enhance young peoples' lives through educational programs and ready access to the game of golf. Since 1998, we have donated over \$1 million in program support, student scholarships and equipment donations to chapters (golf courses) in need, and introduced several unique programs to provide greater awareness around the business and science of golf.
- The Baseball Tomorrow Fund is a grant program of Major League Baseball, designed to promote the growth of youth baseball and softball participation through program funding, field renovations and equipment purchases. We proudly support Baseball Tomorrow Fund's mission by providing grantees with donated and discounted turf equipment, and supporting needed field renovations across the country.



- For many years, The Toro Company has partnered with Project Evergreen's *GreenCare for Troops* and *SnowCare for Troops* programs to provide complimentary lawn and landscape services, and snow and ice removal services for families of currently deployed military personnel, and post 9/11 disabled veterans with a service-connected disability.



LEARN MORE
VISIT US AT: **toro.com**

©2018 The Toro Company, Bloomington, MN 55420
All rights reserved. Printed in the USA.
Part No. 490-9530

Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features, and by location. We reserve the right to improve our products and make changes in specifications, design and standard equipment without notice and without incurring obligation. See your distributor for details on all our warranties.