

Material Topic

SUSTAINABLE PRODUCTS

With a dedication to cordless battery-powered technology, our sustainable products excel in performance, energy efficiency, and safety, delivering solutions that support a more environmentally responsible society.

GOALS AND TARGETS

- Investment in energy-efficient products and safety solutions
- Eliminate product recalls
- Achieve a year-over-year increase in cordless and non-powered products as a percentage of sales

PROGRESS

- US\$648M spent in Research and Development
- 2 product recalls
- 89% of sales are from cordless and non-gas powered products, up from 87% in 2023

RISKS	OPPORTUNITIES	RESPONSES
<ul style="list-style-type: none">Products having a negative impact on their users, communities, and the environment	<ul style="list-style-type: none">Design durable, energy-efficient, cordless equipmentConduct research and development of new technologies and responsibly designed products	<ul style="list-style-type: none">Implementing safety policies and committeesConducting product carbon footprint assessments across product categoriesInvesting in energy-efficient technology
<ul style="list-style-type: none">Non-compliance with product regulations	<ul style="list-style-type: none">Enhance labeling, durability, and recyclabilityMaintain responsible sourcing in the value chain	<ul style="list-style-type: none">Partnering with NGOs for responsible sourcingConducting supplier due diligenceMonitoring of regulations and incorporation of sustainability attributes into design
<ul style="list-style-type: none">Product quality not meeting market demands	<ul style="list-style-type: none">Maintain the high quality of our products while exploring sustainable alternativesCarry out research to better understand and prepare for market demand of sustainable products	<ul style="list-style-type: none">Evaluating the use of sustainable alternative materials in productsEngaging with users to better understand future market demands



VALUE CHAIN

- Suppliers
- Operations
- Customers
- Community

How We Are Managing It

Environmentally responsible products stand as both a top priority and a fundamental driver of our business strategy. This is enhanced by strict product safety standards. Our dedicated teams oversee every aspect of product safety, development, and innovation, ensuring that each solution not only meets industry leading benchmarks but also drives sustainability. Our sustainable product design standards have recently begun rolling out in our Asia operations, with plans for expansion into other regions.

We invest significantly in the development of clean technology, which we define as any process, product, or service that reduces negative environmental impacts through significant energy efficiency improvements, sustainable resource use, or carbon reduction activities. Our Research and Development (R&D) account on the P&L serves as a significant financial indicator for our sustainable products.

Our products are aligned with all mandatory product regulations and are designed to use fewer resources, consume less energy, increase safety, as well as, reduce waste, emissions, and noise during operation. This strategy aligns with our commitment to enable our users to reduce their own environmental footprint without compromising performance.

Our products are designed with sustainability considerations, prioritizing durability through rigorous testing to ensure long-lasting performance. Through careful assessments, we continually evaluate the feasibility of incorporating recycled materials into our products while considering recyclability at the end of their lifecycle, all without compromising quality. Additional considerations, such as weight and material efficiency, help manage environmental impact throughout the production and distribution phases.

Research and Innovation

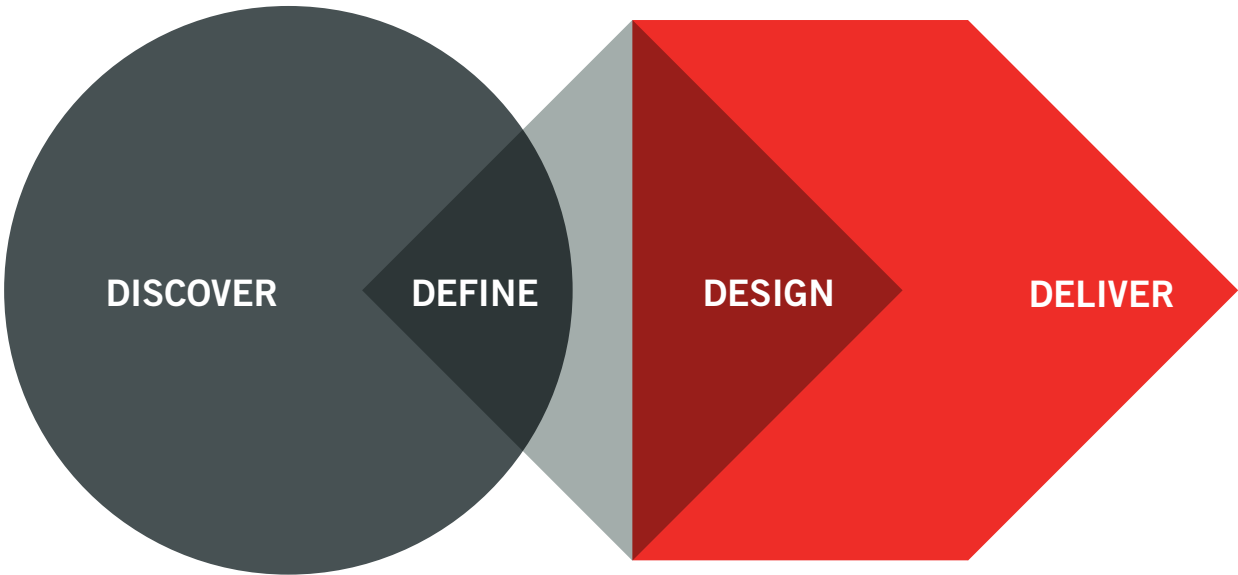
TTI is dedicated to developing cordless product solutions with reduced environmental impact. Through ongoing investment in R&D, we consistently Discover, Define, Design, and Deliver innovative solutions for our customers. Our design and engineering processes emphasize key sustainability principles such as reliability, durability, repairability, refurbishing, and recycling, ensuring that our products have sustainable attributes and are responsibly managed.

US\$648M
spent on Research and Development

Our lead designers and engineers follow our Sustainable Design actions, which align our products with environmental, health, and safety standards while integrating circularity principles. They guide informed decision-making on raw material selection, resource utilization, and substance avoidance throughout the concept and manufacturing phases.

Our R&D team has developed a carbon footprint calculator to be utilized by our engineers to evaluate and develop products with lower environmental impact.

Product Development Framework (4Ds)



Our R&D projects focus on user experience, enhance manufacturing safety, reduce emissions, improve resource efficiency, and promote circularity in our product solutions whenever possible.

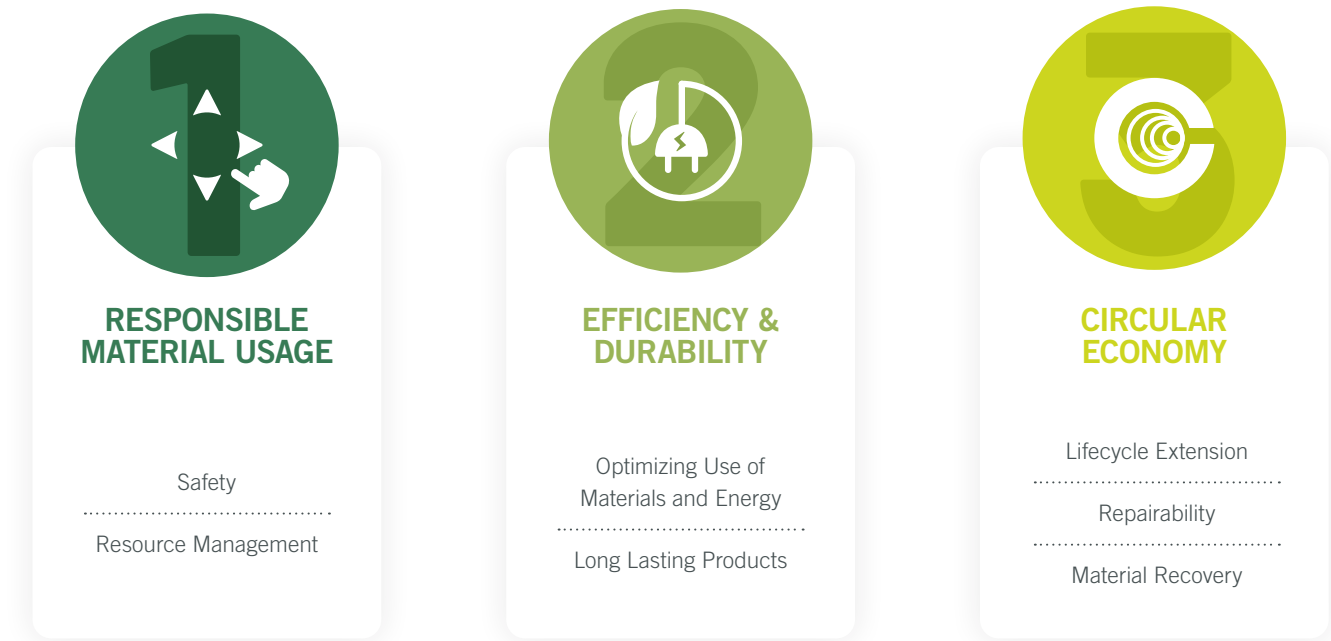
Our R&D efforts are largely focused on product development, particularly the advancement of our cordless battery platforms. These platforms are engineered with both backward and forward compatibility, allowing users to seamlessly operate any product or battery within the same system, no matter when it was developed.

By continually improving our battery packs, we enhance their performance and efficiency with each new generation, delivering increasingly advanced features. This progression not only improves jobsite productivity and safety, but also helps users reduce their carbon footprint by reducing emissions and noise pollution during tool operation. Our focus on the end user ensures that these innovations contribute to a more sustainable and responsible approach to energy consumption.

MILWAUKEE’s FORGE Batteries and Super Charger were named

First Runner-Up
in Home Depot’s
2024 Innovation
Awards

Product Design Principles (3Ps)



Sustainable Product Design

Driven by our commitment to develop powerful, innovative, safe, and sustainable product solutions, we integrate sustainability into our product design process. This approach encompasses reducing emissions, advancing circular economy principles, and prioritizing safety.

Our approach has guided us to identify numerous sustainable design opportunities and product design strategies. From selecting the optimal materials and electronics to driving efficiencies in manufacturing processes, packaging solutions, and product lifespan, we can develop a more holistic and forward-thinking approach to innovation.

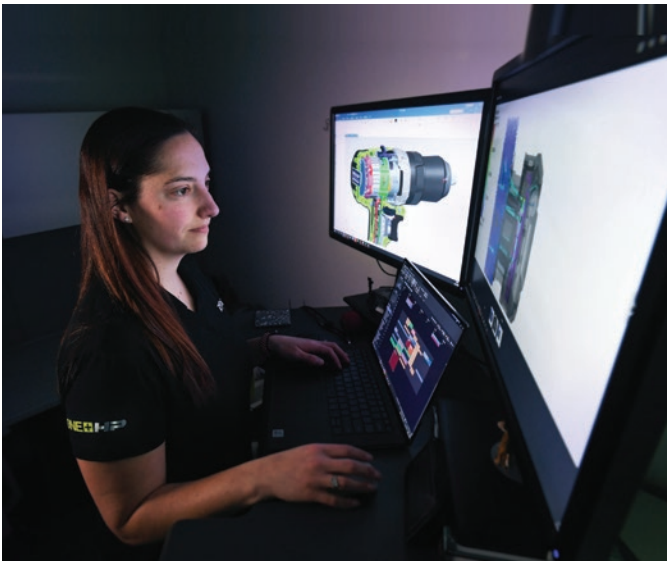
Sustainable Design Action Chart

This table below highlights our sustainable design actions and areas of consideration where feasible.

Sustainable Design Actions	Health & Safety	Emission Reduction	Circular Economy
Responsible material use	√	√	√
Vibration reduction	√		
Dust management	√		
Noise reduction	√	√	
Material & weight reduction		√	
Cost reduction		√	
Improved efficiencies		√	
Component reduction		√	√
Platform modularity		√	√
Improved durability			√
Improved reparability			√

Product Carbon Footprint

A key tool for our sustainable product design strategy is our proprietary carbon footprint calculator. The tool enables us to quantify the environmental impact of our products and identify opportunities for sustainable design. We have continued to conduct carbon footprint assessments for key product categories and share our insights across the company to guide decision making. Our associates are also being trained on the carbon footprint calculation procedure to integrate sustainability considerations in the product development process.



SUSTAINABLE DESIGN CASE STUDY

M12 FUEL
STUBBY 3/8”
IMPACT WRENCH



Improved Efficiency

REDLINK PLUS Intelligence Hardware and Software

- Enables total system communication between tool, battery and charger
- Preset modes optimize power for specific tool applications

POWERSTATE Brushless Motor Technology

- 50% faster application speed, improving productivity

AUTO SHUT-OFF Mode

- Prevents over tightening by applying no more than 15 ft.-lbs. of torque. This helps avoid damage to fasteners and materials, reducing waste



Improved Durability

Protective Rubber Boot

- Protects the tool to withstand corrosive materials commonly found in automotive environments, prolonging tool lifespan

REDLINK PLUS Intelligence Hardware and Software

- Overload protection increases tool life

M12 REDLITHIUM HIGH OUTPUT XC5.0 Battery

- Improved thermal technology enables cooler operation
- Resistant to oils, solvents, and greases

Patented Battery Isolation System

- Improves tool life by maintaining consistent electrical connection between the tool and battery

Modular Platform

M12 Battery System

- The M12 battery powers over 150+ tools
- Designed to be both backward and forward compatible across tools within the same platform, regardless of when they were created

Material and Weight Reduction

Product: Compact and Lighter Weight*

- Reduces material consumption
- Reduces user fatigue
- Improves access to tight spaces

Packaging

- Designed with 15% less packaging material, resulting in 7% reduction in packaging carbon footprint†
- Packaging giftbox is made from over 80% recycled cardboard



LESS MATERIAL CONSUMPTION
IMPROVED ERGONOMICS

*Compared to competitors with solutions of same or less power
†Compared to previous generation

Sustainable Cordless Solutions

Brushless Motors

Brushless motors are recognized for their superior efficiency compared to traditional brushed motors, which suffer from mechanical energy loss due to friction. As a result, tools equipped with brushless motors offer extended lifespans and improved performance. These motors also support advanced features, allowing them to deliver more power in a more compact size. This translates to lighter tools with longer run times.

Artificial Intelligence

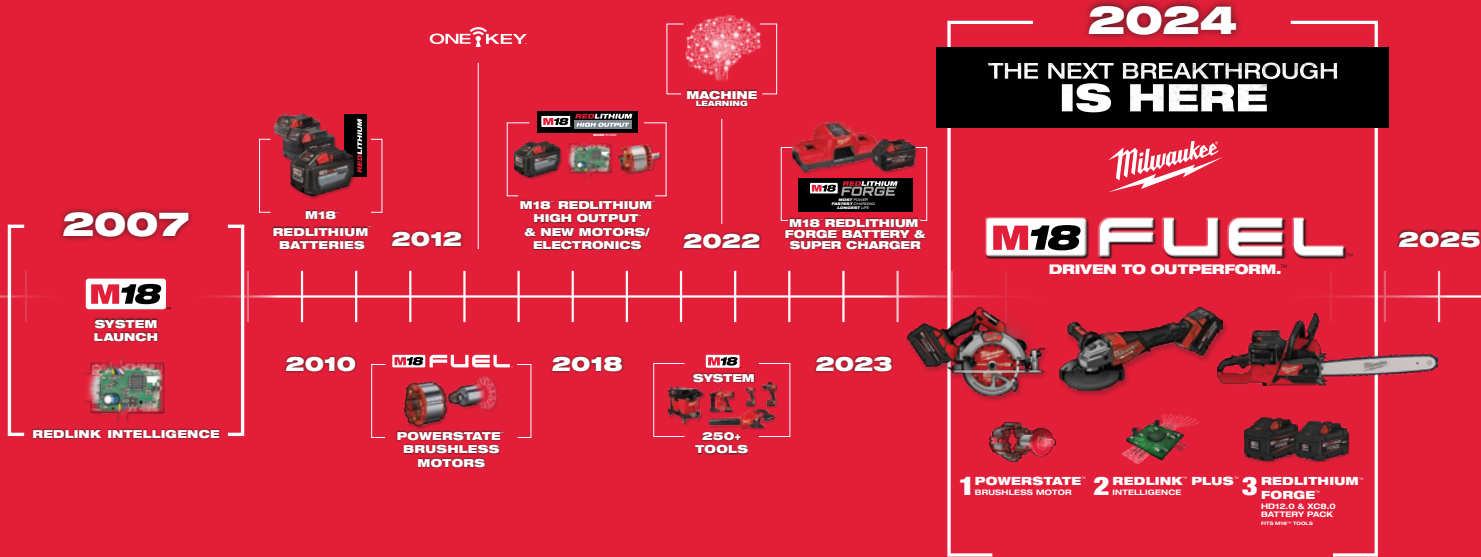
The integration of Artificial Intelligence (AI) improves our users’ ability to deliver quality work with our products. Our MILWAUKEE M18 FUEL Controlled Torque Compact Impact Wrench with ONE-KEY stands as a prime example. With AI sensor technology and Machine Learning, this impact wrench controls bolt installation by memorizing and learning from past usage. By precisely determining optimal bolt tightness, our users can consistently deliver quality work by getting the job done right the first time.

LED

Our LED lights outperform traditional incandescent bulbs by offering brighter and more energy-efficient illumination. Engineered for a range of applications, they cater to both professionals and DIY enthusiasts seeking reliable, durable, easily transportable, and high-performing lighting solutions.



WORLD LEADER IN CORDLESS TECHNOLOGY



RYOBI WHISPER Series advantage vs. Gas Products: A difference you can hear.

NO EMISSIONS*

*While in use

86%

Quieter than gas

57 db

Noise rating

750 CFM

Air volume

Noise Reduction

Addressing the need for quieter solutions without sacrificing performance, our RYOBI WHISPER Series and HOOVER HUSHTONE product lines deliver exceptional results. The RYOBI WHISPER Series is recognized as the quietest range in the industry, utilizing advanced noise-reducing technology to provide outstanding power while operating over 60% quieter than comparable petrol-powered products. In 2024, we expanded the WHISPER Series with four new products, bringing the total to 24 products in the WHISPER Series platform.

Our HOOVER HUSHTONE technology offers a groundbreaking noise reduction feature in our vacuum cleaners, significantly lowering noise levels while maintaining powerful suction.



Product Quality and Safety

TTI's Product Safety Directors, committees, and teams are entrusted with upholding rigorous safety, quality, and compliance standards across all business units, consistently refining our processes to meet evolving demands and requirements. Our commitment to customer satisfaction drives us to enhance safety protocols for every product we design, manufacture, distribute, or license. To deliver an exceptional user experience, we are constantly improving our safety measures.

TTI has established comprehensive Product Safety and Consumer Product Regulatory Compliance Policies that guide our safety efforts. Our Product Safety Committees strictly enforce these measures through compliance monitoring and regular audits. Convening monthly, these committees assess and evaluate the following:

- Customer complaints and online reviews that may indicate potential compliance or safety issues.
- Findings from the assessment results of returned product that could reveal safety or compliance risks.
- Warranty data that could be associated with potential safety risks.

We have implemented robust quality control mechanisms that cover the inspection, testing, and reliability assessment of materials at every stage—from incoming components to manufacturing processes and final outgoing products. Both before and after a product's release, comprehensive safety hazard assessments are conducted. Should corrective action be required, our established product recall policies and protocols allow for swift, decisive action. In support of these efforts, we maintain active partnerships with government regulators, product safety standard developers, trade associations, and consumer groups. Our legal teams, alongside safety and regulatory departments, oversee product recalls, ensuring full compliance with applicable laws until all products are safely managed and disposed of.

In 2024, there were no incidents of non-compliance concerning marketing communications or incidents of non-compliance related to the health and safety impacts of products and services during the reporting period. There were also no violations of labeling or advertising regulations reported.



Our safety evaluations extend across the entire design and development process and encompass the following:

- A formal safety review based on the requirements of International Organization of Standardization (ISO) 12100: 2010 for the hazard review and risk assessment. This is a systematic review of all potential hazards during the life cycle of a product, identifying how risk can be minimized.
- An initial safety review based on the results of our Design Failure Mode and Effect Analysis (DFMEA) and a review of tool construction, will be conducted before the product release.
- A final safety review that verifies the necessary implementation of corrective and preventive actions before products are released for mass production.

TTI complies with all relevant industry standards and regulatory requirements for our products worldwide. Our entities conduct third-party testing, verification, and certification to ensure product safety, meeting US and European market requirements through hazardous substances-free processes, the Registration, Evaluation, and Authorization and Restriction of Chemicals (REACH), and the Restriction of Hazardous Substances (RoHS) testing and certification.

Our customer satisfaction team plays a vital role in ensuring that product safety and performance meets user expectations. This team actively gathers and analyzes customer feedback and complaints to identify areas for improvement, address concerns, and enhance overall satisfaction. Each complaint initiates a thorough review process to determine if further action is required. Root causes are identified, corrective actions are implemented on a case-by-case basis, and preventive measures are established. By maintaining close communication with our customers, we ensure that their insights drive continuous improvement in the safety, quality, and functionality of our products.

Product Stewardship

The HKEX ESG Reporting Guide Content Index outlines regulatory requirements related to health and safety, advertising, labeling, and privacy matters that could significantly impact our operations and performance. We actively monitor social media and online sales platforms for customer feedback, meticulously recording and analyzing comments and complaints. Whether the feedback pertains to design enhancements or more specialized technical training needed for end-users, we promptly address these concerns.



Our product warranty policy further supports customer satisfaction by ensuring a positive post-purchase experience. Additionally, our product safety measures encompass pollution management in manufacturing processes and efforts to reduce end-user exposure to harmful emissions and noise.

As part of our product safety and quality initiatives we:

- Effectively manage customer inquiries through phone, web, and retail channels, ensuring all customer service lines across our brands are adequately staffed.
- Offer comprehensive technical training at product information centers for customers, including dealers and OEM partners.
- Provide product safety training facilitated by our sales and Jobsite Solutions teams.
- Provide product training through the RYOBI NATION platform and MILWAUKEE's Jobsite Solutions team.
- Train field service and customer service representatives to foster stronger customer relationships.
- Deliver repair and warranty services through our product service centers.
- Expand our line of PPE to enhance safety on jobsites.
- Ensure global coordination and collaboration across all of our safety teams.

In 2024, we initiated two product recalls: the RYOBI AIRWAVE 18-Gauge Brad Nailer and the RYOBI AIRWAVE 2-in-1 Brad Nailer/ Stapler. Both products were recalled in the Canadian and Australia and New Zealand (ANZ) markets, impacting a total of 22,492 units. We conducted comprehensive investigations into the primary cause of each tool and took swift corrective action to restore trust in our brands and safeguard consumer well-being.



Safety Stand Down Week

Every year, the Occupational Safety & Health Administration (OSHA) leads Safety Stand Down Week, a critical initiative where construction companies dedicate time to highlight jobsite safety and host events aimed at refocusing efforts to eliminate incidents on the job.

As a leader in health and safety, MILWAUKEE's Jobsite Solutions team in the U.S. plays an active role in supporting safety demonstrations across the United States. They deliver best-in-class training and education in three key areas: preventing musculoskeletal injuries, ensuring hand and arm protection, and addressing slips, trips, falls, and struck-by hazards.

Construction Safety Week serves as an essential reminder of the importance of safety protocols to ensure every worker recognizes potential hazards and knows how to avoid them.

Over 700
safety events
across jobsites