

4,400+ EMPLOYEES STRONG



2020  
SUSTAINABILITY  
REPORT



# Table of Contents

## CEO STATEMENT

President, COO and CEO Statement .....3

## ABOUT US

Who We Are ..... 4  
 Historical Milestones.....5  
 Our Locations ..... 6  
 Our Process and Technology .....10  
 Governance Structure.....11  
 Ethics and Integrity ..... 12

## OUR COMMITMENT TO SUSTAINABILITY

Sustainability ..... 13  
 Materiality Assessment .....14  
 Stakeholder Engagement.....16

## OPERATIONAL EXCELLENCE

Economic Performance..... 21  
 Products and Markets Served..... 22  
 Commitment to Quality ..... 23  
 Waupaca Foundry Earns Partner In Quality Award .....24  
 WF Surpasses Supplier Expectations ..... 25  
 Responsible Procurement.....26  
 Stability In Communities..... 28

## ENVIRONMENTAL STEWARDSHIP

Environmental Stewardship.....30  
 Material Usage and Production Material Efficiency ..... 31  
 Energy Use ..... 33  
 Emissions .....36  
 Total Water Use..... 39  
 Impacted Water Bodies ..... 39  
 Waste ..... 40  
 Significant Spills..... 40  
 Environmental Compliance..... 40

## A WORLD-CLASS WORKFORCE

A Tenured Workforce..... 41  
 Skills Development..... 43  
 Occupational Health and Safety..... 45  
 Safety Metrics ..... 47  
 Employee Wellness and Support ..... 47  
 A Culture of Hardworking Talent..... 48

## REPORT PARAMETERS AND GRI INDEX

Report Parameters .....49  
 GRI Content Index.....50  
 Specific Standard Disclosures ..... 51



### CLICK TO LINK

The **numbers** found in the blue boxes shown throughout this report identify the standard disclosures and indicators associated with the GRI Aspects that we have determined to be material to our business. A list of these disclosures and indicators can also be found in the GRI Content Index found at the end of this report.



# President, COO and CEO Statement

I'm pleased to present Waupaca Foundry's Sustainability Report for the 2020 fiscal year. Waupaca Foundry (WFI) has collected key facts and figures to provide a useful introduction to our operations as well as information to assess our organization's efforts in improving our sustainability performance.

Fiscal 2020 (April 2020 - March 2021) was unlike any WFI has previously experienced in its 65-year history. The world faced the COVID-19 pandemic and associated economic shutdowns that directly impacted WFI operations as manufacturers paused or completely suspended production for weeks at a time, or alternatively, required additional product to support demands in essential services. With foundry and machining locations across five states, WFI closely monitored all state government responses to the pandemic and worked to keep our workforce informed of developing news and rapid changes with daily memos to maintain transparency of WFI's protocols, operations, and federal mandates and actions, such as stay-at-home orders or stimulus bills.

Early in the pandemic, WFI was among the nation's critical manufacturers and an essential source to the supply chain — keeping our doors open and operations running. To protect our workforce, WFI safety teams mobilized action teams at each of our locations to lead COVID-19 response efforts. The action teams were initially established in January 2020 when the first U.S. COVID-19 case was confirmed.

While WFI worked hard to address short-term customer needs, we also worked to preserve the sustainability of our business for the long term. This was reflected in significant modifications to plant operational schedules at each of our locations based on customer production requirements. Efforts were made to maintain, to the best of WFI's ability, flexibility and an ongoing income for our employees during this tumultuous period, including an extra week of vacation for team members to use at any time during 2020, with the option to redeem the monetary value of the vacation benefit, to help offset the stresses of the pandemic.

During July and August, WFI noticed an uptick in production as demand from newly reopened automotive customers increased. However, customer supply chains still faced compromise, and the variability of customer orders continued to affect plant schedules through Q2. By Q3, all plants were running at full force, and this schedule was maintained through the end of the fiscal year. However, the ongoing effects of the COVID-19 pandemic dramatically impacted year-end results.

I want to thank all Waupaca Foundry team members, suppliers, and customers for their resiliency, flexibility and dedication throughout fiscal 2020. We value your feedback and welcome any questions or comments on our sustainable business practices, performance to date, or the content of this report. Please utilize the contact information located on our website to reach out.



**Mike Nikolai**  
President,  
COO and CEO



# About Us



2020 SALES

**\$1.38**  
Billion

## WHO WE ARE

Waupaca Foundry, a Hitachi Metals group company, is the largest producer of gray, ductile and austempered ductile in the world, melting 2,006,254 tons of iron in fiscal 2020. Our castings are produced using our custom-built vertical green sand molding machines and created by a workforce of nearly 4,400+ people that puts generations of expertise to work for our customers every day.

We provide a singular blend of stability and innovation, expertise and collaboration, and the realization that we hold ourselves to higher standards because customers and employees depend on us. We pride ourselves on our technical expertise and process control, providing castings for our customers that only we can produce, as a result of our extensive experience and consistent approach to the application of technology throughout our value chain.



## HISTORICAL MILESTONES

In October 2020, Waupaca Foundry celebrated 65 years of business. Throughout its history, Waupaca Foundry has maintained a reputation of innovation and producing top-quality iron castings. A few years after the foundry started, it had a capacity of melting 30 tons of iron daily. Yielding a fiscal 2020 iron melting capacity of more than 9,500 tons daily across six foundries in the United States, Waupaca Foundry melts the equivalent weight of the U.S. Capitol Dome in Washington, D.C. (comprised of 4,100 tons of cast iron) every 10 hours.

**1871:** The Pioneer Foundry on the banks of the Waupaca River, just east of Main Street in the city of Waupaca, Wis.

**1955:** Assets of Pioneer Foundry were acquired and Waupaca Foundry, Inc. was established.

**1957:** Waupaca Foundry cast truck brake drums, heavy truck axle parts, water- and air-cooled industrial equipment parts, wood and metal working equipment castings, electric motor housings and parts for electric door openers. A 4-ton cupola with a 45-foot stack was constructed, operations were transferred to a new plant (today known as Plant 1), and the melting capacity increased to 30 tons per day.

**1969:** An addition to the industrial park plant of Waupaca Foundry doubled iron casting production capacity at the plant and created what is known today as Plant 2/3.

**1973:** Plant 4 was constructed in Marinette, Wis.

**1996:** Plant 5 was built in Tell City, Ind.

**1999:** The world's largest vertical sand molding machine at Plant 5 was installed. The machine was designed and built by Waupaca Foundry and made it the largest non-captive iron foundry in the world.

**2000:** Construction began on Plant 6, located in Etowah, Tenn.

**2012:** KPS Capital Partners acquired Waupaca Foundry, formerly known as ThyssenKrupp Waupaca. Upon closing, the company was renamed Waupaca Foundry, Inc.

**2014:** Hitachi Metals, Ltd. signs an agreement to purchase Waupaca Foundry from KPS Capital Partners, Waupaca Foundry is acquired by Hitachi Metals, Ltd. and joins its High-Grade Functional Components Company.

**2015:** \$27 million is invested to expand three plants in Waupaca, Wis.

**2016:** Hitachi Metals Automotive Components USA merges with, and operates as, Waupaca Foundry.

**2018:** WFI announces expansion into Michigan; plans to open a new casting processing facility.

**2019:** WFI opens a machining operation adjacent to its gray iron foundry located on the east side of Waupaca.

**2020:** The Lawrenceville ductile iron operation is sold to Victaulic for the production of mechanical pipe joining and flow control iron castings.



## OUR LOCATIONS

Waupaca Foundry employs a staff of more than 210 at its headquarters in Waupaca, Wis. Our plants employ locally and deliver globally, serving a range of market sectors worldwide.



### PLANT 1

**WAUPACA, WI**  
501 Employees

**Iron Type:** Gray iron  
**Melt capacity:** 90 tons per hour  
**Markets served:** Agriculture, construction, commercial vehicle, material handling, hydraulics, power tool, and power transmission  
**Products manufactured:** Hydraulic housings, flywheels, weights, covers, brackets, turbo bearing housings, clutch housings, pulleys, and brake rotors



### PLANT 1

**IRONWOOD, MI**  
40 Employees

**Facility Type:** Gray iron casting cleaning and finishing facility.  
**Markets served:** Agriculture, construction, material handling, hydraulics, and power transmission  
**Products Finished:** Hydraulic housings, covers, brackets, bearing blocks, clutch housings, and pulleys



**PLANT 2/3**

**WAUPACA, WI**  
805 Employees



**WAUPACA FOUNDRY  
MACHINING CENTER**  
15 Employees

**Iron Type:** Gray iron  
**Melt capacity:** 120 tons per hour  
**Markets served:** Light vehicle, agriculture, commercial vehicle, construction, material handling, heating, power tools, power transmission, and infrastructure  
**Products manufactured:** Electric motor housings, boiler sections, transmission housings, brake rotors, flywheels, and bedplates



**PLANT 4**

**MARINETTE, WI**  
750 Employees

**Iron Type:** Ductile iron  
**Melt capacity:** 75 tons per hour  
**Markets served:** Light vehicle, material handling, power transmission, agriculture, hydraulics, and commercial vehicle  
**Products manufactured:** Brake calipers, brake anchors, differential cases, bearing caps, slack adjusters, spring hangers, and steering housings



## PLANT 5

**TELL CITY, IN**  
898 Employees

**Iron Type:** Gray iron, ductile iron, and compacted graphite

**Melt capacity:** 160 tons per hour

**Markets served:** Light vehicle, commercial vehicle, agriculture, and construction

**Products manufactured:** Brake rotors and drums, brake calipers, crankshafts, differential carriers, differential cases, and flywheel housings



## PLANT 6

**ETOWAH, TN**  
554 Employees

**Iron Type:** Ductile iron

**Melt capacity:** 80 tons per hour

**Markets served:** Light vehicle, material handling, agriculture, construction, hydraulics, and commercial vehicle

**Products manufactured:** Brake calipers & anchors, differential cases, knuckles, control arms, and damper hubs





**PLANT 7**

**LAWRENCEVILLE, PA**  
205 Employees

**Iron Type:** Ductile iron  
**Melt capacity:** 20 tons per hour  
**Markets served:** Light vehicle and commercial vehicle  
**Products manufactured:** Suspension components, exhaust manifolds, and brackets for original equipment automotive manufacturers



**PLANT 7**

**EFFINGHAM, IL**  
231 Employees

**Type of facility:** Machining and assembly  
**Markets served:** Light vehicle and commercial vehicle  
**Products manufactured:** Suspension components, exhaust manifolds, and brackets for original equipment automotive manufacturers

## OUR PROCESS AND TECHNOLOGY

Our process begins with a blend of raw materials composed of a customized mix of metals, select alloys and recycled scrap iron. The mixture varies based upon the needs of our customers and the type of casting that is produced. The metal mixture is melted in large furnaces at temperatures ranging from 2,600 to 2,800 degrees Fahrenheit. The molten iron is then poured into molds made out of sand. Cores, which are molded sand inserts, are used to create the interior surfaces of the casting. We use a variety of core making processes that give us flexibility in the complexity, size, weight and dimensional control of our castings. As the castings travel down the molding line, the temperature gradually decreases and the castings enter a shakeout process to remove sand from the castings. Over 80 percent of the sand is reclaimed and recycled for reuse. The castings are then cleaned to remove residual sand and other molding media from the casting surface. The final step is to grind off any excess material left from the molding process and inspect in order to meet our customers' specifications.

We design and build our own casting equipment that helps prevent downtime and offers efficiency and customization to meet our customers' requirements. In some casting applications, we even help reduce the need for multiple cast, fabricated or welded parts, thereby simplifying assemblies for our customers, as well as reducing their inventory costs. We apply cutting edge technology to reduce total overall manufacturing costs through innovative casting and core passage designs, waste reduction and mass reduction of our products. The techniques used in our process allow us to design, engineer and manufacture world-class equipment and processes. Not only is our process cost competitive, it also improves casting consistency and quality.

## WAUPACA FOUNDRY MISSION

Waupaca Foundry produces iron castings, focusing on transportation, construction, agriculture, and industrial markets worldwide.

We embrace lean manufacturing techniques in all our facilities and manage other value-added services for our customers. Our customers' expectations are met through innovative technology, continuous improvement culture, and the efforts of our dedicated, motivated, highly trained work force.

We maintain strong social and environmental commitments to our employees and communities, including: improvements sustained through GREEN initiatives, a well-maintained and safe environment, and the encouragement of employees' personal growth through advancement and continuing education.

## GOVERNANCE STRUCTURE

Our corporate governance framework ensures accountability, fairness and transparency in our relationship with our stakeholders. Our sustainability program is overseen by a cross-functional Sustainability Committee, made up of representatives from all areas of our business.

Waupaca Foundry's Board of Directors currently consists of seven directors who have four meetings throughout the year and report regularly to indirect parent company Hitachi Metals, Ltd. The Board oversees several committees, including the Sustainability Committee, and our sustainability strategy and reports are made available to the Board. Primary leadership for sustainability implementation resides with the Director of Environmental Engineering who reports to the President, COO and CEO, who serves as the executive sponsor of the Sustainability Committee.



“

*“Our commitment to environmental responsibility moves beyond regulatory compliance to ensure our long-term sustainability. Initiatives like these create value that benefits our customers, shareholders, employees, suppliers and the public.”*

*Mike Nikolai  
President, COO and CEO for Waupaca Foundry*

”

## ETHICS AND INTEGRITY

Our Code of Conduct and compliance policies embody our commitment to ethics and integrity in business and guide us toward meeting the challenges of a global market while adhering to our principles of social responsibility.

Waupaca Foundry is committed to respecting the fundamental rights laid down in the United Nations Universal Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work. Consistent with Principle 15 of The Rio Declaration on Environment and Development, Waupaca Foundry also supports the use of the precautionary principle in its approach to risk management in its strategic planning and policy implementation.

Our Code of Conduct emphasizes our commitment to the goals of sustainable development, aside from the company's economic performance, and also includes social benefits, resource consumption, jobs and advanced training. The Executive Board and Managing Board of Waupaca Foundry are responsible for the principles outlined in our code of conduct, including:

- Equal Opportunity
- Working Time and Vacation
- Remuneration
- Health, Safety, and Working Conditions
- Promotion of Vocational Training
- Right to Associate
- Forced and Child Labor

We are committed to ensuring that these principles are made known to customers and suppliers, and we encourage our customers and suppliers to consider corresponding principles in their own corporate policies. Waupaca Foundry's Code of Conduct is available upon request.



## CODE OF CONDUCT

Suspected violations are to be reported to Waupaca Foundry's legal department by phone at +1 715-258-6611 or email at [communications@waupacafoundry.com](mailto:communications@waupacafoundry.com). All reported potential violations are reviewed and investigated by the legal department. The Board of Directors is informed after an initial investigation is completed.

# Our Commitment to Sustainability



## SUSTAINABILITY

Foundries have long served as society's recyclers, and our industry provides value to society by diverting materials such as old iron castings and scrap steel from landfills, and instead using them as input materials in the melting process to create new products. Recycling old castings offers the net least environmental impact to remake another casting and reuse what is no longer being used for its original purpose. The use of steel scrap in charge mixes as an additional material helps to achieve the same goal. This recycling trend is not exclusive to iron foundries, but includes aluminum, copper, lead and other metal foundry operations.

Along with the valuable benefits resulting from foundries' role as recyclers of scrap metals come a number of impacts associated with foundry processes. Regardless of the source of our input materials, melting metal requires large quantities of energy. Water is needed to cool production equipment used in the foundry environment. Foundry operations also have the potential to generate large amounts of dust that can impact the atmosphere. Waste generated by foundries includes large volumes of foundry sand from the molding and casting process. Just as we do with our products, Waupaca Foundry's approach is to apply science and our technological expertise to address these impacts, as described in the following sections of this report.

To focus these and other sustainability efforts under a cohesive, structured initiative, we formed a Sustainability Committee in 2014. The Sustainability Committee works through a formal process to identify the issues that are material to our business, identify our key stakeholders, and develop objectives and targets that support our overall sustainability vision.

**The five basic principles in the Hitachi Metals Company Code of Conduct provide the foundation of our sustainability strategy:**

1. Enhancing Awareness of Social Responsibility and Corporate Ethics
2. Pursuing Mutual Growth with Our Business Partners
3. Promoting Truthful Communication with Society
4. Thinking about Our Next Generation – An Environmentally Friendly Solution
5. Fostering the Welfare of Employees and Society

## MATERIALITY ASSESSMENT

The Sustainability Committee conducted a materiality assessment to formally define the issues important to us and our stakeholders. We rated each of the aspects using the six evaluation criterion below and ranked the aspects by average weighted materiality score:

- Financial Implications
- Legal/Regulatory/Policy Implications
- Established Industry Norms
- Relevance to Stakeholders
- Opportunity for Innovation
- Forward-Looking Adjustment for Future Risk/Opportunity

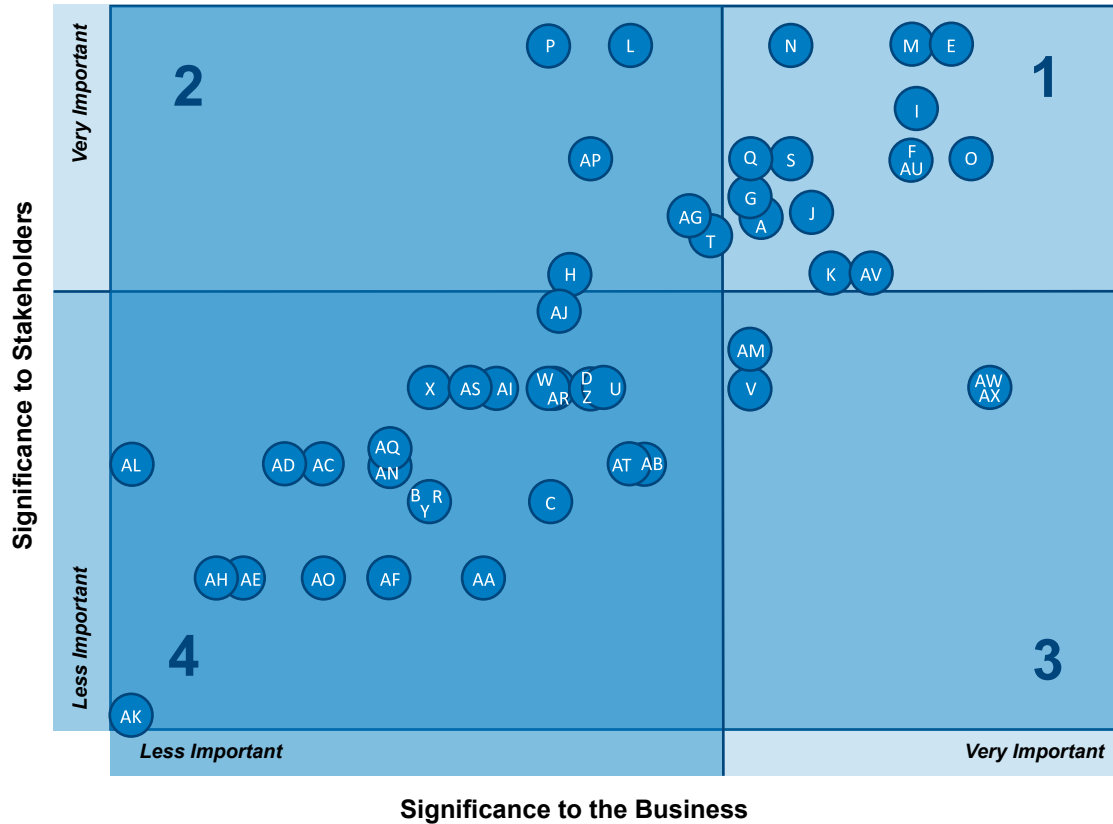
The team then used this ranking to evaluate appropriate targets for disclosure and performance improvements. In setting objectives and targets, the team reviewed the availability and quality of current data to assess the ability to improve disclosure, as well as the complexity of the effort required to improve performance. Evaluation criteria for the material aspects were aligned with the Sustainability Accounting Standards Board's (SASB) materiality assessment criteria ([www.sasb.org](http://www.sasb.org)), and results of the materiality assessment align with our internal Enterprise Risk Assessment outcomes. Our assessment process provides means to periodically evaluate our focus areas and allows us to concentrate on those areas of greatest concern to our stakeholders and greatest impact on our business. All material aspects apply to all of our business units to some degree.



### WHAT IS A MATERIALITY ASSESSMENT?

A materiality assessment is an exercise designed to gather insight on the relative importance of specific economic, environmental, social and governance issues within the organization's boundary for a given time period. An organization should report sustainability issues that cause the most impact within these areas, as well as those considered most important by its internal and external stakeholders. The materiality assessment is the process of determining these material issues and their impact on internal and external stakeholders.

## Materiality Assessment



## Material ASPECTs (GRI G4)

A Economic Performance	AA Freedom of Association and Collective Bargaining
B Market Presence	AB Child Labor
C Indirect Economic Impacts	AC Forced and Compulsory Labor
D Procurement Practices	AD Security Practices
E Materials	AE Indigenous Rights
F Energy	AF Assessment (Human Rights Review and/or Impact Assessment)
G Water	AG Supplier Human Rights Assessment
H Biodiversity	AH Human Rights Grievances and Resolution
I Emissions	AI Local Communities
J Effluents and Waste	AJ Anti-Corruption
K Products and Services (Environmental)	AK Public Policy (Political Involvement)
L Compliance (Environmental)	AL Anti-Competitive Behavior
M Transport	AM Compliance (Social)
N Overall (Environmental)	AN Supplier Assessment for Impacts on Society
O Supplier Environmental Assessment	AO Grievance Mechanisms for Impacts on Society
P Environmental Grievance Mechanisms	AP Customer Health and Safety
Q Employment	AQ Product and Service Labeling
R Labor/Management Relations	AR Marketing Communications
S Occupational Health and Safety	AS Customer Privacy
T Training and Education	AT Compliance (Products and Services)
U Diversity and Equal Opportunity	AU Quality
V Equal Remuneration for Men and Women	AV Logistics
W Supplier Assessment for Labor Practices	AW Research and Development
X Labor Practices Grievance Mechanisms	AX Future Technology Development
Y Investment	
Z Non-discrimination	

## MATERIALITY ASSESSMENT *(Continued)*

Based on our materiality assessment, we identified the following material aspects for our business, which form the basis for our report content and performance metrics:

### Environmental

- Materials
- Energy
- Emissions
- Effluents and Waste
- Supplier Environmental Assessments
- Water
- Overall (Environmental)
- Transport/Logistics
- Products and Services (Environmental)

### Social

- Employment
- Occupation Health and Safety
- Training and Education
- Legal Compliance
- Marketing

### Economic

- Economic Performance
- Indirect Economic Impacts
- Procurement Practices
- Quality

## STAKEHOLDER ENGAGEMENT

The Sustainability Committee also worked through a systematic process to identify and prioritize stakeholders, and evaluate the significance of aspects against criteria that supported the business mission and objectives.

Evaluation Criteria for mapping and assessing stakeholder prioritization were:

- Influence and Decision-Making Power
- Credibility
- Willingness to Engage
- Proximity and Duration of Relationships
- Contribution Value

Our stakeholder evaluation included benchmarking of key customers and competitors to better understand issues of importance and industry norms. Our participation in industry trade groups such as the American Foundry Society (AFS), Foundry Educational Foundation (FEF), and Wisconsin Manufacturers & Commerce (WMC) also informed our process and allows us to promote the discussion and advancement of environmental topics, including energy use and carbon-related emissions. For example, Waupaca Foundry staff participate in Solid Waste Water and Air Quality technical committees through AFS that develop and share best practices amongst AFS members for managing solid waste and protecting air and water quality. We are also involved in AFS's efforts to explore ideas on how foundries can operate in a more sustainable manner in the future.

We recognize additional opportunities in the area of stakeholder engagement and will continue our efforts to better understand and incorporate our stakeholders' views into our sustainability initiatives and reporting.





## STAKEHOLDER ENGAGEMENT *(Continued)*

The Sustainability Committee identified opportunities with employees and their families, customers and our suppliers as primary areas of focus, and we continue our engagement strategies to solicit views from these stakeholder groups, as shown in the following table:

STAKEHOLDER GROUPS	ENGAGEMENT STRATEGIES
Current Employees	<ul style="list-style-type: none"> <li>• Open door policy</li> <li>• Monthly and quarterly management meetings</li> <li>• Biannual planning meeting</li> <li>• Mobile app with 80 percent employee adoption</li> <li>• Employee wellness program</li> <li>• Kaizen continuous-improvement program</li> <li>• Behavior-based safety, including safety suggestion and near-miss reporting</li> <li>• Waupaca Way production management system</li> <li>• Biannual town hall meetings</li> </ul>
Employees' Families and Dependents, and Retirees	<ul style="list-style-type: none"> <li>• Company picnics and anniversary and retirement celebrations</li> <li>• Summer help and internship programs</li> <li>• Hire retirees as consultants</li> </ul>
Prospective Employees	<ul style="list-style-type: none"> <li>• Job fairs</li> <li>• College industry conference (Foundry Educational Foundation)</li> <li>• Plant tours and visits</li> <li>• Foundry-in-a-Box simulation</li> <li>• Mini cupola demonstrations on site or at universities and technical colleges</li> <li>• Scholarships and K-16 partnerships, local college investment</li> </ul>
Customers	<ul style="list-style-type: none"> <li>• Blog and e-newsletter (<a href="#">PartingLINE</a>)</li> <li>• Voice-of-the-Customer surveys</li> <li>• Foundry 101</li> <li>• In-house visits</li> <li>• Value analysis/Value engineering and other collaborations</li> <li>• Trade show participation</li> <li>• Code of conduct and compliance policies published</li> <li>• <a href="http://waupacafoundry.com">waupacafoundry.com</a></li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>• Code of conduct and compliance policies published</li> <li>• Supplier assessments</li> <li>• <a href="http://waupacafoundry.com">waupacafoundry.com</a></li> </ul>

Using our materiality assessment and our stakeholder mapping results, our committee established comprehensive performance improvement objectives and targets for our company. Our management approach and performance indicators for 2020 are outlined in the following sections of this report.

## STAKEHOLDER ENGAGEMENT *(Continued)*

MATERIAL ASPECT (GRI G4)	OBJECTIVES	TARGETS (Fiscal 2014 Baseline Year Unless Otherwise Noted)
Indirect Economic Impacts	To be a positive economic impact on the communities in which we operate.	<p>Provide and support educational opportunities to local citizens, including direct funding to schools, internships, student employment opportunities and scholarships.</p> <p>Provide competitive compensation, which supports the employees' families and in turn other community businesses (as compared to available external compensation reports).</p>
Materials	Develop and promote the reduction in the use of (formerly) non-recyclable raw materials.	<p>Completion of a feasibility study in fiscal 2015 to determine the reduction opportunities for new clay and sand via reclamation system technologies. (Complete—original study effort deemed infeasible. Transition efforts to optimization and expansion of existing sand reclamation technology through 2021.)</p> <p>Completion of a feasibility study in fiscal 2015 to determine melt system modification strategies to reduce the coke-to-melt usage ratio. The feasibility project identified efficiency opportunities to be pursued in 2020, which included additional testing and verification of coke quality, the development of a metric to monitor/evaluate melting efficiency across all plants, and the development of a long-term energy efficiency investment plan to improve melt efficiency.</p>
Energy	Facilitate energy use reductions in Waupaca Foundry operations.	Reduce energy use by 25 percent over the next 10 years, using fiscal 2009 energy use as the baseline (mmBtu/ton of iron shipped).
Emissions	Promote alternative processes and maintain state-of-the-art pollution control technologies.	Maintain air pollution control systems considered as "best available" by the U.S. Environmental Protection Agency and associated state regulatory agencies for all processes regardless of the original installation date.

## STAKEHOLDER ENGAGEMENT *(Continued)*

MATERIAL ASPECT (GRI G4)	OBJECTIVES	TARGETS (Fiscal 2014 Baseline Year Unless Otherwise Noted)
Effluents and Waste	Reduce spent foundry sand generation while promoting off-site reuse/recycling opportunities of remaining spent foundry materials to achieve zero landfill disposal.	Reduce spent foundry sand generation by 30 percent in 10 years (baseline 2010) (tons). Investigate the feasibility of developing alternative uses for remaining foundry byproducts by calendar 2021.
Water	Facilitate water use reductions in Waupaca Foundry Operations.	Reduce water use consumption by 80 percent in 10 years (baseline 2010) (gallons/ton of melt).
Environmental Compliance	Identify and maintain compliance to legal and other requirements to which the organization subscribes and that are applicable to the environmental aspects of its activities, products and services.	Maintain the organizational commitment to ongoing compliance with no receipt of violations, fines or sanctions.
Supplier Environmental Assessment	Ensure environmental compliance and promote environmental stewardship and sustainability throughout the supply chain.	Rank and initiate the assessment of the top 25 significant suppliers (representing 70 percent total spend) in fiscal 2015. (Complete—Strategies to communicate identified potential improvements for top suppliers expanded through 2021.)
Occupational H&S	Prevent health and safety incidents for employees, contractors and visitors.	Achieve a consolidated Total Recordable Injury Rate (TRIR) of 2.0 or less in fiscal 2020.  Achieve a consolidated Days Away, Restricted or Transferred (DART) rate of 1.0 or less in fiscal 2020.
Training and Education	Create and support career development opportunities for employees' personal growth.	Maintain 100 percent tuition reimbursement for Waupaca Foundry employees' continuing education (within company guidelines).  Maintain 100 percent of Waupaca Foundry employees receiving career training each year (training required to perform their specific job requirements and/or developmental training for future growth).  Achieve and maintain leadership training to 100 percent of the employees in leadership positions. 54 percent are currently trained with the new completion goal of 100 percent by 2025.  Achieve and maintain leadership training to 100 percent of the employees in leadership positions by 2025.** Fiscal 2020 ended with a 54 percent result.  Foster and maintain a 50 percent or greater total promotion rate for management level positions from internal employees. Fiscal 2020 ended with a 83 percent result.

\*\*For leaders with greater than six months of service.

## STAKEHOLDER ENGAGEMENT *(Continued)*

### 2023 Sustainability Goals

- Reduce energy intensity by 5 percent by end of fiscal 2023, using fiscal 2019 energy use as the baseline (MMBTU per ton of iron melted).
- Reduce the cumulative electrical consumption carbon footprint 30 percent by end of fiscal 2023 via investment in new renewable energy developments facilitated by virtual power purchase agreements (VPPA).
- Maintain air pollution control systems considered as “best available” by the U.S. Environmental Protection Agency and associated state regulatory agencies for all processes regardless of the original installation date.
- Achieve a cumulative 80 percent beneficial reuse of spent foundry materials by end of fiscal 2023 (percent tons beneficially reused against total tons generated).
- Reduce water use consumption by 10 percent by end of fiscal 2023 (baseline 2020)(gallons).



**Reduce Energy**



**Reduce Water Consumption**



**State-of-the-Art  
Pollution Control**



**Repurpose Spent  
Foundry Sand**

# Operational Excellence



## ECONOMIC PERFORMANCE

Waupaca Foundry aims to be a positive economic impact on the communities in which we operate, and throughout the COVID-19 pandemic, WFI had to make decisions that were best for the health and safety of its employees and the viability of this business. Because of these resolves, the pandemic's associated economic shutdown as well as U.S. mandates and protocols, WFI's fiscal 2020 revenue was negatively impacted.

In March, at the beginning of the virus's emergence in the U.S., 95 percent of North American automakers announced production shutdowns through the end of April with some OEMs delaying a staggered startup until June. Off-highway, commercial vehicle and other industrial manufacturers followed suit. While not all customers suspended production, many rescinded or cancelled orders. In addition, many U.S. States issued Safer- or Stay-At-Home orders, which shut down operations of all non-essential business.

As a result, WFI was hit hard and had to adapt to the dramatic downturn in customer orders with its own staggered or intermittent production, reductions in headcount, cancelled bonuses and more. However, Waupaca Foundry was able to maintain operations as an essential business while also working to slow the curve of the virus by aggressively implementing its own COVID-19 response and policies and taking care of its own by providing an additional week of vacation to all hourly employees to use in 2020.



## PRODUCTS AND MARKETS SERVED

Throughout the COVID-19 pandemic, Waupaca Foundry was considered an essential manufacturer and continued to fulfill the iron casting needs of essential manufacturers, including transportation, construction, agriculture and industrial markets. While WFI operations are highly diversified, with the capability of producing 5,000 part numbers from 350 product categories, throughout fiscal 2020, Waupaca Foundry focused on supporting critical infrastructure. Many parts were in high demand from our customers because our work supported frontline workers and helped to restock and meet the demand of product throughout the pandemic. For example, brake and wheel-end parts kept trucks on the ground delivering medical supplies, groceries and other essential items. Our material handling parts helped essential workers to unload and restock shelves for healthcare, construction and household supply inventories. WFI continued serving the needs of the U.S. market at one of the most important and uncertain times in recent history.

Located in the U.S., our foundries serve the following markets:

- Agriculture
- Construction
- Infrastructure
- Commercial Vehicle
- Light Truck and Passenger Car
- Material Handling
- Hydraulics
- Power Tools
- Power Transmission
- Heating, Ventilation and AC Equipment
- Fitness
- Municipal



## COMMITMENT TO QUALITY

We believe our customers deserve the best quality, on time, at a competitive price. Many of the products we make, such as brake components, are safety critical and demand high quality. We understand and meet or exceed the strict standards and requirements of our customers, stakeholders and government agencies, and accountability lies with all members of the organization through understanding their roles in supporting quality and customer satisfaction. We maintain company-wide certifications to the ISO 9001 and IATF 16949 international quality standards, and our manufacturing and inspection processes ensure customers have the highest quality castings in the industry.

We pride ourselves on the way we apply science to our product design and manufacturing processes. From our top leaders to our manufacturing teams, metallurgists are involved in controlling process consistency and continuously improving our technology. We have developed proprietary processes and customized equipment to monitor iron temperature, additives and casting materials down to a hyper-detailed level, which ensures that our products are consistently durable and reliable.

Other examples of our technology, including digital imaging, robotic core production, and automated iron pouring, allow us to increase efficiency while maintaining quality and reducing production costs.

In conjunction with these efforts, our research and development team is tasked with developing and promoting high-strength materials to facilitate lightweight casting designs and other uses of advanced materials. The initial stage of research and development for all new product materials includes consideration for performance, product safety and regulatory aspects of our products.

We create educated, informed buyers via our customized training events and technical road shows. Through our unique Foundry 101 industry initiative, we share how Waupaca Foundry improves total casting manufacturing cost with our custom-built equipment along with casting design and engineering support.



## WAUPACA FOUNDRY EARNS 2020 PARTNER IN QUALITY AWARD

Waupaca Foundry was recognized with a **2020 Partner in Quality** award by the ZF Company's Commercial Vehicle Control Systems (F.K.A. WABCO), a global technology company that supplies mobility systems for passenger cars, commercial vehicles and industry technology. The award commends Waupaca Foundry for the safe launch of a machined air disc brake component that is used in trailer wheel end assemblies as well as its ability to meet an aggressive launch deadline with zero sample defects.

In a year when the supply chain faced momentous challenges, including rapid changes to policies and protocol, disruption of demand, unreliable materials and depleted inventories, Waupaca Foundry surpassed expectations to keep up with delivery through responsiveness, flexibility and risk management.

“Even with a very compressed timeline and launch challenges, we were able to meet the target through true collaboration, open dialog with all parties, and ultimately the execution of a very well-planned course of action,” said John Wiesbrock, executive vice president, sales, marketing and supply chain management for Waupaca Foundry.



“

*“This award underscores the value of our team, who went above and beyond to maintain dynamic production schedules and deliveries in a time of constant change.”*

*Mike Nikolai,  
President, COO and CEO for Waupaca Foundry*

”



## WAUPACA FOUNDRY SURPASSES SUPPLIER EXPECTATIONS AMIDST PANDEMIC

In 2020, Waupaca Foundry earned a supplier award for its commitment to quality and supplier excellence from diesel engine global manufacturer, Cummins, Inc.

The **2020 Outstanding Supplier** award recognizes suppliers who have “gone above and beyond” expectations and excelled in efforts to continue to supply Cummins with parts during the COVID-19 pandemic. Waupaca Foundry managed weekly production and parts delivery through proactive collaboration and communication, all while ensuring no line down or freight premium occurrences.



“

*“Waupaca Foundry’s continued dedication has allowed us to provide essential products and services to our customers during even the most difficult times.”*

*Helen Zhang, purchasing manager for Cummins, Inc.*

”

## RESPONSIBLE PROCUREMENT

Waupaca Foundry's procurement strategy seeks to purchase products and services with high quality and competitive costs through better purchasing processes and dealing with all our suppliers with trust, respect, ethics, honesty and integrity. Waupaca Foundry values the long-term relationships we have established with our strategic suppliers, many of which go back 30 years or more.

Our supply chain for raw materials is global and diverse. Waupaca's supply chain management organization structure includes procurement, order fulfillment and new product delivery processes and teams. The role of the procurement teams is to centrally manage all sourcing and buying decisions to leverage costs across the organization while also ensuring that these decisions adhere to established controls and procedures. Logistics, supplier development and supplier quality are also the responsibility of the procurement teams.

Purchased cost-reduction processes are also led by the supply chain management team, including implementing alternative melt materials, supplier-consigned inventories, just-in-time deliveries and strategic sourcing initiatives.

We also seek to mitigate risks through the utilization of multiple methods for tracking incoming materials with longer lead and logistic times by product. Several logistical solutions are used for incoming materials, including trucking, rail and water vessel transport. Critical components routinely ship via two transportation methods in order to reduce risk. For example, foundry coke and sand are delivered by both truck and rail on a weekly basis in order to ensure an uninterrupted flow of key materials. Where feasible, we have also established alternate supply sources on a local and regional basis that can be used as potential contingency sources if needed.

In addition to managing risks associated with our supply chain, a primary objective is to ensure environmental compliance and promote environmental stewardship and social responsibility throughout the supply chain. In support of these efforts, the completion of our 2015 goal to rank and screen our top suppliers has resulted in the identification of potential areas for sustainability recognition and improvement. Strategies to communicate these findings with this group have been initiated (who represents 70 percent of our total annual spend). Current actions include:

- Focus on relevant topics during supplier site surveys.
- Communicating improvements through all business contacts including delivery, logistics, cost reduction, new products and dunnage discussions.
- Sharing information through new vendor bidding process and contractor safety program.
- Implementation of a WFI Scrap Conference event with material suppliers.

Unlike prior years of business, due to the emergence of the COVID-19 pandemic in fiscal 2020, Waupaca Foundry experienced supply constraint challenges in:

- Hardwood dunnage including pallets, plywood and cardboard dividers, pallets, plastic, plastic bags and more, used to protect castings during shipping and transport.



## RESPONSIBLE PROCUREMENT *(Continued)*

- Petrochemicals materials, such as binders and resins, etc. used in various stages of the core making and broader iron casting process.
- Metallics, including scrap used to make new castings and steel shot used in the casting cleaning and finishing process.
- Logistics, with trucking for incoming raw materials being constrained because of the labor crisis.

In Q1, a global semiconductor shortage developed due to capacity constraints as well as the lack of inventory in microcontrollers, sourced from a single supplier outside the U.S. In the same quarter, a winter storm in Texas caused mass damage, depleting chemical plants' plastics, foams and resins supplies. In addition, depleting steel inventory from multiple industries disrupted sectors, and delays at U.S. ports due to a surge in demand for containers left suppliers waiting for their parts in transit. The week-long Suez Canal blockage in Q1 also impacted companies supply schedules.

Waupaca Foundry was not subject to the U.S. Security and Exchange Commission's Dodd-Frank Wall Street Reform and Consumer Protection Act in 2016. This act regulates the use of conflict minerals, which are mined in conditions of armed conflict and human rights abuses, notably in the eastern provinces of the Democratic Republic of the Congo. Due to the importance of this issue to both Waupaca Foundry and our customers, we pursue the following regarding conflict minerals:

### Conflict Minerals Policy Statement

Waupaca Foundry, Inc. is committed to sourcing raw materials and components from companies that share our values with regard to human rights, ethics, and environmental responsibility. We expect all of our suppliers to abide by the requirements of our code of conduct, which prohibits human rights abuses and unethical practices. We also require all suppliers to comply with all applicable legal standards and requirements.

On August 22, 2012, the U.S. Securities and Exchange Commission ("SEC") issued the final conflict minerals rule under section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Conflict Minerals Rule"). The Conflict Minerals Rule requires publicly traded companies to report annually the presence of conflict minerals (tin, tungsten, tantalum, and gold, or "3TG") originating in the Democratic Republic of the Congo and adjoining countries ("Covered Countries").

Waupaca Foundry supports the goal of ending violence, human rights violations, and environmental devastation in the Covered Countries. We are committed to complying with any requirements applicable to our Company under the Conflict Minerals Rule.

Waupaca Foundry will assist our customers in implementing their conflict minerals programs. We strive to work cooperatively with our customers and supply chain partners in implementing conflict minerals compliance programs.

Waupaca Foundry requires our suppliers to provide us with complete conflict minerals declarations. We may reconsider our willingness to partner with suppliers that fail to comply with this policy.



## WAUPACA FOUNDRY PROVIDES STABILITY IN COMMUNITIES

Throughout 2020, society witnessed significant change and disruption to long-held traditions and habits that make individual communities unique. Waupaca Foundry is proud to have continued supporting its communities in which we do business throughout the COVID-19 pandemic to promote prosperity, opportunity and a glimmer of comfort in uncertain times.



### Empowering Brighter Futures

To support the next generation of talent, Waupaca Foundry continued its mentorship and scholarship program.

This included the distribution of \$39,000 in scholarships to 26 graduating high school seniors, the highest amount awarded to date.

In addition, Waupaca Foundry provided 45 internships, summer employment to more than 175 college students and cooperative work-school program positions to 55 high school students throughout the 2020 fiscal year.

Waupaca Foundry also continued its support of school programs through donations and partnerships, including a 10,000 lbs. weight refurbishment project for a local high school.

In the fall of 2020, Menasha High School, located in Northeast Wisconsin, was in desperate need of new weight room weights. However, because of stay-at-home orders at the beginning of 2020 and the subsequent surge of at-home workout equipment sales, the school could not afford to purchase brand new weights. The school instead asked for help from two local companies, Alliance Industries and Waupaca Foundry, to refurbish its weights. Waupaca Foundry cleaned all 10,000 lbs. of weights, sent them on to Alliance to be powder coated, and the weights were then delivered back to the high school — all within a week.



Plant 1 team members (left to right): Bart Buhler, Jake Kurtzweil, Sam Maggio and Julius Windsor helped assemble the Little Free Library.

### Contributing to Local Organizations

Waupaca Foundry also supported many diverse operations in the community, including the restoration of a historical bell, an installation of a Free Little Library, and a non-perishable item and paper product donation drive.

In the summer of 2018, a storm went through Waupaca, Wis, affecting the Hutchinson House — a preserved home that was built in 1854 — and its historic bell. The old school bell was from Sunny View School in Waupaca, a one-room schoolhouse built in 1910. While the bell, dated to be from the late 1800s, remained intact, the storm had broken the over 100-year-old frame that held it upright. The Waupaca Historical Society reached out to Waupaca Foundry to reconstruct the broken iron castings. Many departments were utilized at Plant 2/3 to recreate the broken castings into new molds. By utilizing gray iron for the bell's framework, it increased the durability, strength and the component's longevity. As of the fall of 2020, the bell has been placed again in the Hutchinson House's backyard.

In all communities, the COVID-19 pandemic placed stress on families, and Waupaca Foundry worked to find creative outlets that could provide relief.

While libraries and schools were closed for much of 2020, the Waupaca, Wis., community ensured children had access to reading materials by regularly stocking the area's 20 Free Little Libraries. As of July 2020, one of the newest Little Free Libraries is located right across from Waupaca Foundry's Plant 1 location on Elm Street. Waupaca Foundry bought a kit and built the Free Little Library to give back to the community. The Little Free Library features Waupaca Foundry's logo and is accompanied by a bench, cast and donated by Waupaca Foundry's gray and ductile iron location in Tell City, Ind.

At Waupaca Foundry's Etowah, Tenn., plant, HR Recruiting-Hiring Manager, Misty Webb, saw on Facebook that the Ronald McDonald House of Knoxville, a nonprofit that is dedicated to supporting families across the nation who have sick children, needed donations to help support the families utilizing the resources of the charity, including free housing and meals. Many team members at the plant were overjoyed to help, collecting over \$1,000 worth of non-perishable items and paper products.

"It's important with the world being shut down and [Waupaca Foundry] being fortunate enough to continue to run and supply our customers and generate revenue, to give back," Diana Elrod, assistant plant manager at Waupaca Foundry's ductile iron location in Etowah, Tenn., said.

“

*“The focus behind it was giving back to the community.”*

*Carmen Peskie, human resources manager*

”



# Environmental Stewardship

At Waupaca Foundry, everyone is responsible for Environmental, Health, and Safety (EHS). Continual improvement in EHS performance is integral to our culture. All of our plants are certified to OHSAS 18001 and ISO 14001, and we use these management systems' frameworks to support achievement of our sustainability goals. See our Occupational Health and Safety section for more information on how we are managing those issues at our facilities.



## Waupaca Foundry's Environmental Leadership Is Recognized

**Federal government:** Under the U.S. Department of Energy's Better Buildings, Better Plants Program, the company voluntarily agreed to reduce energy usage by 25 percent over 10 years and has reduced energy intensity at all six of its plants by more than 21.1 percent from 2009-2019 (but temporarily setback to a 17 percent improvement in 2020 due to COVID-19 related challenges). Waupaca Foundry was also the recipient of the 2020 Better Project Award from the program for innovations at its Tell City, Ind., plant after designing a system to remove humidity from the air around the plant's cupola to reduce energy consumption.

**Industry:** Waupaca Foundry won the 2020 Green Foundry Sustainability Award presented by the American Foundry Society (AFS) for integrating sustainable business practices throughout its manufacturing operations in the form of the implementation of the ISO 50001 Energy Management System, creating a formal management system approach to energy reduction.



Pictured (left to right) accepting the 2020 Green Foundry Sustainability Award is Kevin Buch, Marco Gonzalez, Bryant Esch, Aaron Brogaard, Mike Glatczak, Dale Hardel, Steve Heger, Rebecca Sommers, Clinton Schmidt, Dennis Bergan, Brian Levezow.

## MATERIAL USAGE AND PRODUCTION

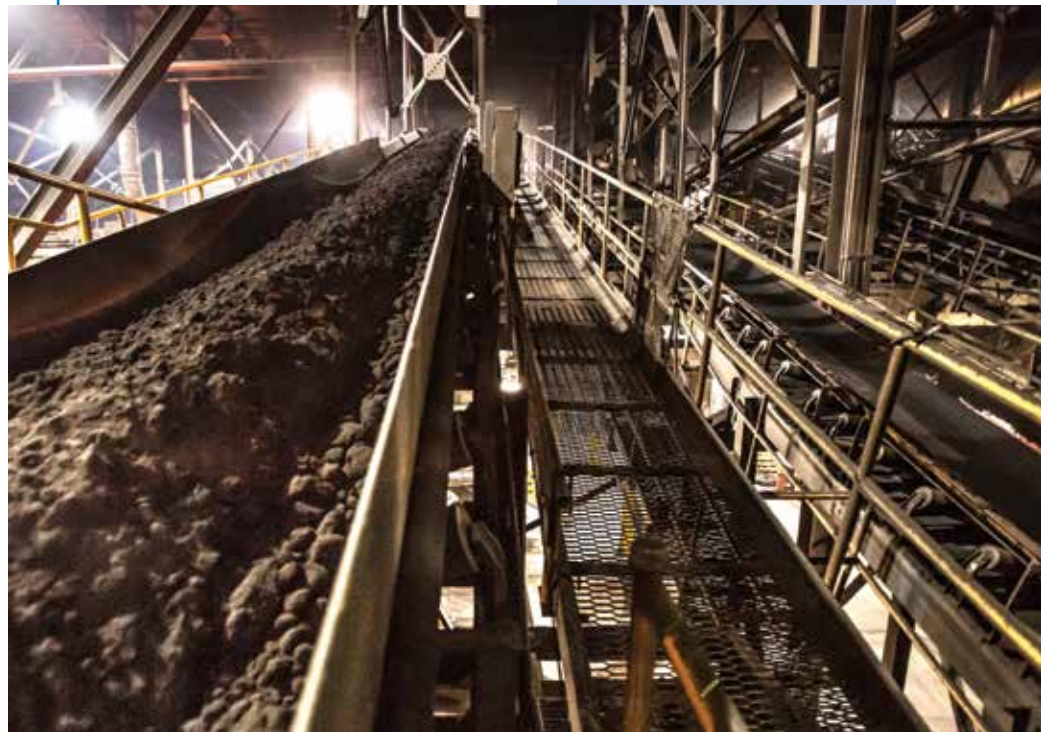
### MATERIAL EFFICIENCY

In 2020, more than 2,006,254 tons of material were melted. Approximately 85 percent of the materials used in our melt process come from recycled materials. Along with the metal raw material, Waupaca Foundry also uses metallurgical foundry coke in the melt process.

One of our goals for 2020 was to continue to implement melt system modification strategies to reduce the coke-to-melt usage ratio, saving us money spent on raw materials while also reducing our energy consumption and associated greenhouse gas emissions. We continuously look for opportunities to incorporate alternative recycled materials into our process, such as using shredded steel, direct reduced iron fines, and oil filters. This includes identifying recycled materials that were previously not able to be recycled. Use of the new alternatives will keep these materials out of landfills while also providing us with new raw material sources.

To support the implementation of coke reduction improvements, alternative carbon sources have been identified to replace a percentage of feedstock coke, thus reducing coke usage while simultaneously increasing iron carbon pickup. Additional coke reduction actions have included strategic replacement of key equipment, adjustments of dehumidification systems to reduce incoming air moisture, improvement of coke quality control and improvement of available data and metrics to optimize coke use. To date, the results of these efforts are allowing Waupaca Foundry to improve its coke use ratio and define a long-term investment plan to increase melting efficiencies at all cupola facilities.

The sand used to make the cores and molds in casting metal parts is another significant material used in our process. We look to reclaim and reuse the sand to the extent possible, and we estimate that each grain of sand is used approximately 50 times before it is no longer able to be used to create quality castings. A feasibility study was conducted in 2015 at the Waupaca, Wis., and Tell City, Ind., foundries to determine

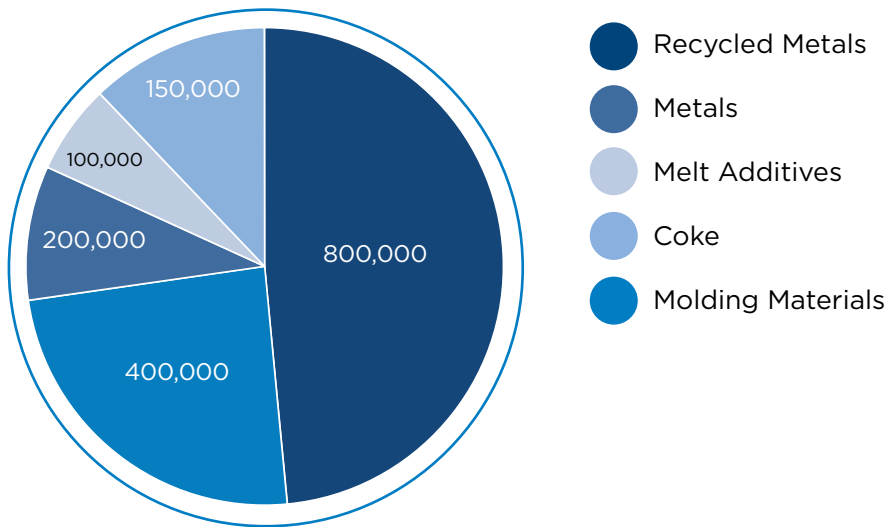


## MATERIAL USAGE AND PRODUCTION MATERIAL EFFICIENCY *(Continued)*

reduction opportunities for new clay and sand reclamation system technologies. By using less sand in our process, we can reduce the amount of sand that must be landfilled. Lab scale tests were conducted on target foundry byproducts to prove initial capability of the proposed technology to separate clay from waste system sands and dust collection points using a high-pressure, water-attrition scrubbing method. The recovery process will discharge no new waste material. Moving forward, pilot tests will be conducted to confirm the proposed technology will actually work in practice. Recovered materials will be characterized and performance tested using the foundry test facility at the University of Northern Iowa. This work was completed in July 2017 with study data concluding that the proposed technology was not feasible. As a result of this outcome, a renewed emphasis is being placed in the optimization and expansion of sand reclamation technologies already in use at Waupaca Foundry.

### KEY INPUT MATERIALS USED IN 2020

**TOTAL TONS USED**  
Rounded Value





## ENERGY USE

Our primary impact to the environment is as an energy-using entity. It takes a large amount of energy to melt metals and run our operations, including natural gas, electricity and coke, and we are committed to managing our energy use efficiently. Energy savings have a direct effect on our bottom line, and we have set a target of reducing energy intensity (measured in mmBtu/ton of product shipped) by 25 percent by 2020. From the program baseline year of 2009 to 2020, a cumulative energy intensity improvement of 16.9 percent has been realized.

Note: 2020 resulted in a continued reduced improvement as compared to the prior achievement of 23.5 percent due to:

- Reduced production volume (vs. FY2019) posed a significant factor affecting the metric, as Waupaca Foundry facilities achieve higher efficiency levels with greater production volumes.
- Significant negative impacts due to COVID-19 pandemic effects on performance.
- Operational inefficiency due to nationwide labor shortage.
- Negative impacts were partially offset by ongoing coke quality/supply improvements, increased use of alternate carbon sources and optimization of currently implemented blast dehumidification technology.

This improvement stems from a number of energy-use-reduction strategies. Recent project examples include lighting replacements, compressed air distribution and air treatment upgrades, compressed air adaptive control systems, cooling tower variable frequency speed (VFD) controls (fans and pumps), energy monitoring system / sub-metering, and engineered compressed air nozzles. We continue to strategically and systematically reduce our energy footprint through a number of targeted initiatives:

- As one of the first 32 charter companies in the U.S., we participate in the Better Plants program, a U.S. Department of Energy initiative designed to foster energy efficiency and long-term sustainability.
- We have launched a pilot initiative at our jobbing foundry in Waupaca, Wis., implementing ISO 50001, the Energy Management System standard. ISO 50001 specifies requirements for establishing, implementing, maintaining and improving an energy management system, and enables an organization to follow a systematic approach in achieving continual improvement of energy performance. Moving forward we intend to implement ISO 50001 across the organization. ISO 50001 certification was achieved at the pilot facility in October 2016.



*A core scrubber removes spent gas from the core making process before the air is discharged.*

## Energy Policy

- R - Review established energy management objectives and targets.**
- E - Ensure the availability of information and resources to achieve those objectives and targets.**
- D - Drive for continuous improvement in the efficient use of energy.**
- U - Use energy efficiency as a key component of the procurement of new equipment, energy services, major renovations, and new design.**
- C - Commit to energy management excellence through compliance with applicable legal and other requirements.**
- E - Educate employees on their energy management responsibilities.**

## ENERGY USE *(Continued)*

COVID 19 brought some challenges to the implementation of capital projects due to the disruption in the supply chain and reduced production demand at our plants. Instead, we focused on keeping our people safe and healthy.

In response, we focused our efforts on maximizing energy conservation while operating at reduced production volumes, reduced staff and non-traditional schedules. Our energy teams optimized operational and maintenance best practices, such as start-up / shutdown procedures to minimize energy waste during non-production hours and our compressed air leak repair program. Implementation of these measures facilitated energy savings of 16,180,000 kWh for fiscal 2020.

Operating our plants during these atypical production schedules provided an opportunity to better understand the impact of reduced production on the plants' energy efficiency. Utilizing energy monitoring capabilities and engineering analysis, additional opportunities to save energy were identified and projects related to the installation of adaptive control systems were engineered for compressed air and dust collection systems. The engineered projects were budgeted to be implemented in the 2021 fiscal year, along with the expansion of our energy monitoring capabilities to track electricity, natural gas and compressed air.

As part of the long term melt optimization plan, the detailed engineering phase for a second Cupola Blast Air Dehumidification system was completed for Plant 2/3 located in Waupaca, Wis. The engineering study results identified a potential coke use reduction of 3.5 percent. The system is scheduled to be installed and commissioned in 2021.

We have publicly endorsed the U.S. Department of Energy's *Accelerate Energy Productivity 2030* goal to double U.S. energy productivity by 2030 (e.g., increasing the economic value created per unit of energy used). As part of this endorsement, Waupaca Foundry commits to:

- Improve energy productivity within our organization, state or community;
- Share solutions, success stories and progress;
- Encourage other organizations to endorse the Energy 2030 goal; and,
- Participate in Energy 2030 education and outreach activities.

Moving forward, our focus will be on the continued implementation of identified projects, operation and maintenance best practices, energy training and process improvements to the cupola operations to improve energy efficiency in our melting processes.

In 2020, we used 754,685 megawatt hours (MWh) of electricity. Our combined energy consumption from coke, natural gas and electricity was over 13,022,931 MMBtu.



*The Plant 2/3 cupola offers a melt capacity of 470,000 tons annually.*



“

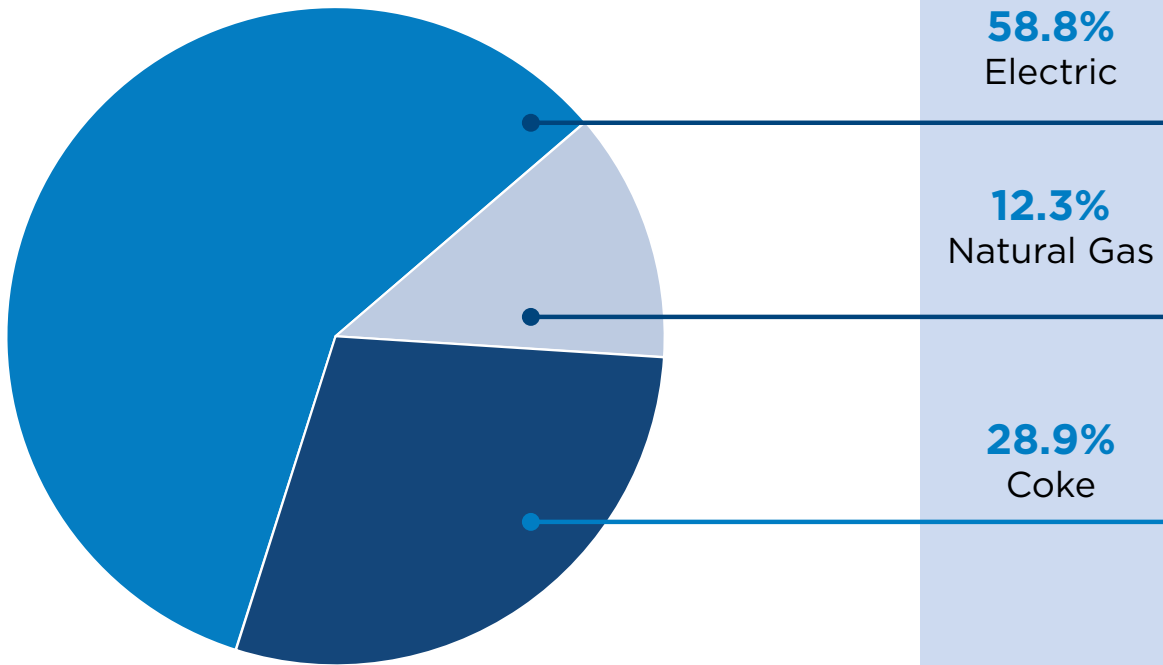
*“Better Plants partners are implementing innovative energy efficiency solutions in the industrial space that are cutting costs and energy use, and the Better Practice and Better Project awards honor their leadership.”*

*Valri Lightner,  
U.S. Department  
of Energy*

”

## ENERGY USE *(Continued)*

### ENERGY CONSUMPTION BY TYPE, FISCAL 2020



Consumption per ton of iron melted captures gains in energy efficiency that may occur even as overall energy increases due to higher production rates. Waupaca Foundry's consolidated energy intensity was 6.404 mmBtu/ton of iron melted.



*A hot metal carrier transfers molten iron to one of six vertical molding lines at the Marinette, Wis., ductile iron foundry.*



## EMISSIONS

### Air Emissions

Foundry processes generate dust, sand and other particles resulting from the molding of our customers' castings that, if improperly handled, could impact the atmosphere. Air filtration systems and advanced baghouse technology are used to achieve superior air pollution control results at our facilities. The air pollution controls we have put in place are considered as "best available" by the U.S. Environmental Protection Agency (USEPA) and associated state regulatory agencies regardless of applicable regulations, which are driven by the installation date of the control equipment. A key component to this technology is the use of advanced bag leak detection probes installed within the emission control systems at each plant. In most cases, this technology is not mandated by a regulatory agency but utilized as an elective continuous improvement. Because even small holes can affect the performance of baghouse filters, these probes are used to monitor the integrity of the baghouses and performance of the filtration system.

### GHG Emissions

GHG emissions are divided into three categories:

- Scope 1 emissions are emissions that result directly from an organization's operations, such as burning fossil fuels.
- Scope 2 emissions are indirect emissions from a utility provider resulting from energy used by the organization, such as electricity, steam or chilled water.
- Scope 3 emissions are the result of other sources indirectly related to an organization.

Currently we track only our Scope 1 and Scope 2 emissions. Scope 1 emissions include the use of coke in the melting process and the combustion of natural gas at our facilities. Fuels used in relatively small quantities representing less than 1 percent of total energy consumption, such as gasoline, light oil and LPG are not included in these calculations. Scope 2 emissions are the result of purchased energy utilized at our plants. In 2020, our total GHG emissions were 1,010,980 tons of carbon dioxide (CO<sub>2</sub>). The Total CO<sub>2</sub> Emissions graph shows the breakdown of our Scope 1 and Scope 2 emissions by facility. The majority of our Scope 1 emissions come from the use of coke, a high-carbon content material, in our melt process.

Emissions, as well as our climate change risks/opportunities and management strategies, are reported to CDP (formerly the Carbon Disclosure Project), the largest database of primary corporate climate change information in the world.

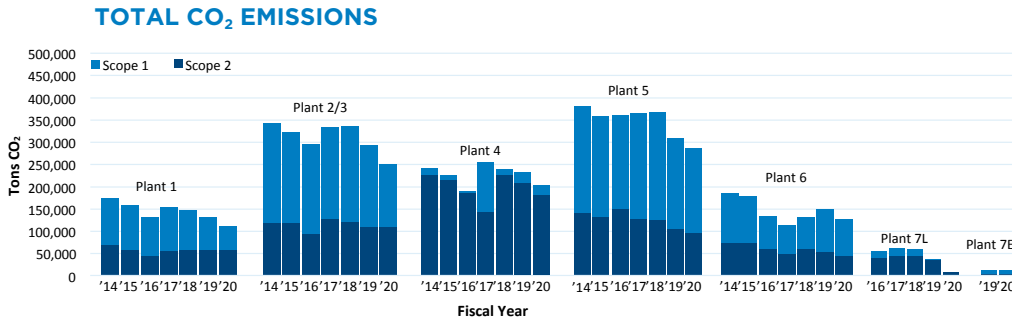


The company began retrofitting plants with elective sophisticated air pollution controls beginning in 1999. Both air emission controls and leak detection technology have surpassed regulatory requirements and created new industry benchmarks in pollution control.



## EMISSIONS *(Continued)*

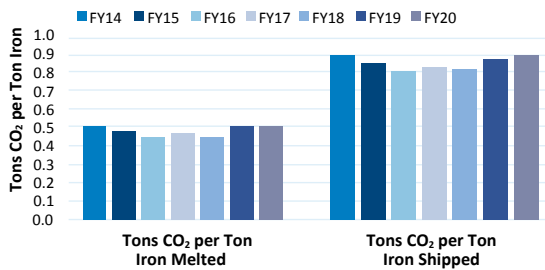
### TOTAL CO<sub>2</sub> EMISSIONS



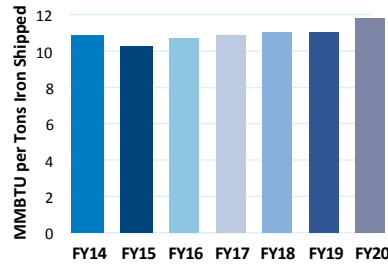
\* All tons in U.S. Tons

In addition to our absolute GHG emissions, we also normalize our GHG emissions based on tons of iron melted and tons of product shipped, similar to the way we track our energy consumption. The graph shown below includes normalized values for our consolidated GHG emissions as well as total energy use per ton of iron shipped.

### NORMALIZED CO<sub>2</sub> EMISSIONS (SCOPE 1 & 2)



### NORMALIZED TOTAL ENERGY USE



Although we do not currently track the GHG emissions related to the transportation of products, we recognize that transportation is a significant issue for us due to the size and weight of our products. As our customers look to support greater fuel efficiency in their products, there will be more demand for lightweighting iron castings, reducing associated transportation impacts.



### High-Strength Ductile Iron Control Arm Meets Lightweighting Objectives

Waupaca Foundry, in collaboration with Hitachi Metals America, successfully converted the Ford CD4 platform lower control arm from aluminum to high-strength ductile iron, not only achieving weight and cost savings for the company but also relieving the company's supply chain that was facing disruption due to the high volume of production.

Ford Motor Company originally selected a 25.4 pound (11.5 kg) aluminum lower control arm for its CD4 platform. Because aluminum components are often utilized for their lightweight capabilities in the automotive industry, it achieved the company's weight reduction goal. However, it resulted in a considerable cost increase when compared to ductile iron and caused continued stress to the company's supply chain.

After the initial launch of the aluminum component, Ford asked Hitachi Metals America to explore the development of a lightweight ductile iron solution that could meet the company's weight reduction objectives as well as provide significant cost savings and stiffness capabilities over the current aluminum component.

Because of increased production demand, Ford required an intensely compressed development schedule that would result in Waupaca Foundry having to launch the new product without the typical number of prototype phases.

Hitachi Metals design engineers designed a suspension component that exceeded performance and weight reduction targets, utilizing HNM® 500M high-strength ductile iron for its high ductility and toughness.

The final design was refined by more than 20 design iterations, and the team worked with Ford to ensure that mating part interfaces for the control arm were carefully detailed to enhance durability and proper assembly function.

Converting the control arm from aluminum to high-strength ductile iron enabled exceptional lightweighting and optimization for the component. Overall, the high-strength ductile iron control arm was optimized to 19.2 pounds (8.7 kg), a 25 percent weight reduction of 6.2 pounds (2.8 kg) from the aluminum component. Waupaca Foundry also helped Ford realize a 30 percent cost savings per casting and 30 percent higher stiffness compared to the aluminum solution.

**BEFORE:** Ford CD4 control arm



**AFTER:** Ford CD4 control arm



## TOTAL WATER USE

Historically, our foundries consumed large quantities of water, including non-contact cooling water used to cool running machinery and the exterior of the cupolas used in our melt process. As a result of prior efforts to meet our 2020 water conservation goal, water consumption was reduced 70.8 percent from 2010 values.

Waupaca Foundry has already made significant progress toward this goal by installing closed-loop water cooling systems. Several of our plants have installed such systems for machine cooling.

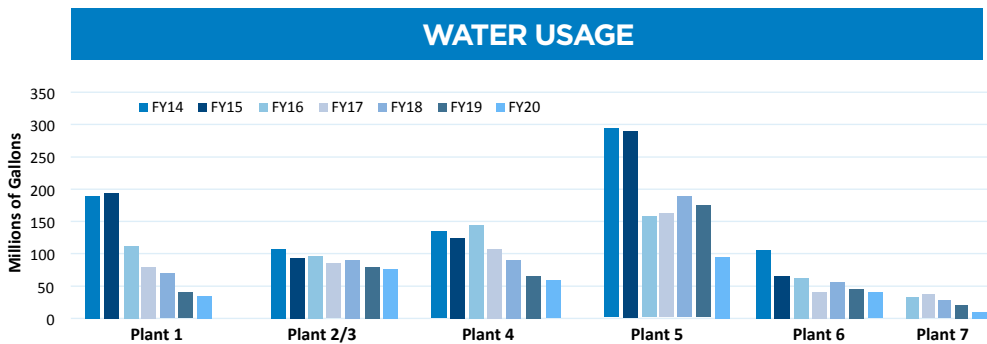
Prior to these initiatives, cooling water flowed through machines just once prior to discharge. With the new closed-loop systems, non-contact cooling water is recycled to improve efficiencies and reduce water consumption. For example, implementation of this technology has resulted in a 30- to 95-percent reduction in cooling water use at our Marinette ductile iron foundry, with water demands varying on a seasonal basis. The recent Plant 1 expansion project in Waupaca included six new warm box machines on a closed-loop cooling water system that will save an estimated 50,000 gallons of water daily, or approximately 15 million gallons annually.

In fiscal 2020, the combined water usage for all Waupaca Foundry locations was 314 million gallons from municipal water supplies compared to 433 million gallons in 2019, comprising the year to date water use reduction of 70.8 percent from 2010 values.



## CLOSED LOOP

Closed-loop cooling water systems have the potential to reduce plant water cooling demands by 80 percent or more. In some cases, non-contact cooling water discharges are reduced to near zero and daily water use is drastically reduced.



## IMPACTED WATER BODIES

As a result of plant improvements we implemented over the last decade, contaminated process water requiring wastewater treatment and discharge has been completely eliminated from our facilities. None of Waupaca Foundry's plants withdraw water from, or negatively impact, waters that are protected or considered to be of high biodiversity value.

## WASTE

In 2020, Waupaca Foundry generated a total of 587,025 tons of solid waste. Of this, only 6.3 tons was hazardous and the remaining majority of 435,230 tons was recycled in lieu of disposal. We minimize the generation of hazardous waste through initiatives such as product substitution and effective work practices. Significant sources of non-hazardous waste included sand dust from our baghouses, melt dust, slag, spent foundry sand, cores and refractory.

One of Waupaca Foundry's highest volume byproducts is spent foundry sand used to make molds for the casting process. Although the sand is recaptured and recycled to the extent possible, there comes a point when it can no longer be used for creating quality castings and it becomes a spent material. Successful initiatives have been developed that continue to reduce the use of foundry sand while concurrently looking for ways to keep foundry sand out of landfills by finding beneficial uses for the sand that can also aid the local communities. The majority of the sand that can no longer be used in the casting process does not end up in a landfill. Approximately 80 percent, or 347,000 tons, of sand is recycled annually. This reclaimed sand finds new life in applications in construction, agricultural use and geotechnical fill.

Waupaca Foundry has been working with state and local agencies, including the Wisconsin Department of Transportation, to use foundry sand as a highway subbase fill, geotechnical fill and other general construction uses. Not only does this keep the sand out of landfills, but it also reduces the need for mining native materials from other places to be used as the source for these applications. This material also gives us an opportunity to partner with our local communities on projects, and additional beneficial reuse efforts are discussed in our community section.

## SIGNIFICANT SPILLS

Waupaca Foundry uses a number of chemicals in its process to keep its equipment operating at peak levels, including coremaking resins, hydraulic oil, lubricants and anti-freeze. There were no significant spills in 2020 at any Waupaca Foundry locations.

## ENVIRONMENTAL COMPLIANCE

Waupaca Foundry is committed to identifying and maintaining compliance to legal and other requirements to which our organization subscribes and that are applicable to the environmental aspects of our activities, products and services. Our commitment is reflected in our EHS Policy and incorporated into our sustainability targets and objectives. Fiscal 2020 resulted in no fines or sanctions associated with environmental noncompliance events.



### WAUPACA FOUNDRY ENVIRONMENTAL, HEALTH, AND SAFETY POLICY – CAST

**C - Commitment** to Environmental, Health and Safety excellence through employee consultation and participation, risk reduction/hazard elimination and compliance with EHS regulations and other requirements.

**A - Always strive** for continuous improvement and prevention of accidents, injuries, and pollution.

**S - Set and review** EHS objectives and targets.

**T - Train** employees on their EHS responsibilities.



# A World-Class Workforce



## A TENURED WORKFORCE

Waupaca Foundry has a history of encouraging people to reach their greatest potential. This has the dual benefit of providing us with the skilled workforce that allows us to produce innovative, best-in-class products while simultaneously improving our sustainability program through the same type of innovation. We're proud that Waupaca Foundry has been an employer of choice, and we believe in taking care of our employees and offering opportunities for personal development. The result: Customers have the most qualified production team in the industry. From operations to administration, we are dedicated to creating advancement opportunity for our employees throughout the company. Many of our team members have started in general foundry positions and have progressed into a variety of careers over the years. In fact, president, COO and CEO, Mike Nikolai started with Waupaca Foundry in 1993 as a metallurgist at the company's gray iron foundries in Waupaca, Wis. He held progressively responsible positions, including production manager, assistant plant manager in Tell City, Ind., plant manager in Etowah, Tenn., and vice president of operations. He was appointed President, COO and CEO on April 1, 2015.



**G4-10**



**G4-11**



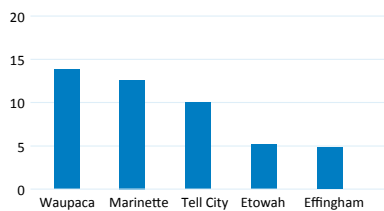
**G4-LA11**

## A TENURED WORKFORCE *(Continued)*

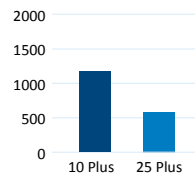
The opportunity for career growth and personal development is a significant reason why more than half of Waupaca Foundry's employees have been with the company for more than 10 years. Much of the organization's success can be attributed to the experienced workforce and the direct employee/management relationship that is clearly recognized at the manufacturing facilities.

The following graphs show the average length of employee service time by location and the number of employees that have been employed by Waupaca Foundry for more than ten years, as well as those who have worked for us for 25 years or more.

### AVERAGE SERVICE YEARS



### YEARS OF EMPLOYMENT



Waupaca Foundry's code of conduct recognizes the right to collective bargaining (as similarly recognized by national regulations).



*Millroom operator Kevin Klotzbuecher inspects a municipal casting before loading it into the barinder machine.*

## SKILLS DEVELOPMENT

In addition to careers in metallurgy and foundry technology, we also have support positions in IT, sales, purchasing, human resources, accounting and finance, and administration. Our company is dedicated to helping our employees cultivate career paths that give them professional satisfaction while also developing the workforce that we need. One hundred percent of our employees receive performance reviews annually, and during this process we work with our employees to lay out a career development path for them. Some common opportunities are:

- Specialized operational positions
- Leadership positions
- Support and administrative positions

We have developed a customized internal training program intended to teach entry-level employees more specific foundry knowledge and processes. Experts from specific areas provide thorough instruction on casting iron the Waupaca Way.

We advanced a number of training program goals that we set for 2020, including:

- Provide 100 percent tuition reimbursement for employees' continuing education (following company guidelines). Waupaca Foundry continued to provide tuition reimbursement for 100 percent of our employees. In 2020 alone, over \$767,000 of tuition reimbursement was provided for employees' elective continuing education.
- Provide annual career training for 100 percent of our employees, with training related to specific job requirements as well as developmental training for future career growth. Through 2020, we provided career training / job specific training to 100 percent of our employees.
- One hundred percent of our workforce has received Six Sigma related training (lean, green belt, black belt, kaizen, 6S, etc.), and the program achieved the goal prior to the targeted completion date.
- Provide leadership training to 100 percent of the employees in leadership positions by 2025. Through 2020, leadership training had been completed for 54 percent of our applicable employees. (\*For leaders with greater than six months of service.)
- Foster and maintain a 50 percent or greater total promotion rate for management level positions from internal employees. Currently, 83 percent of our management level positions are filled with internal employees that have been promoted from within Waupaca Foundry.

Waupaca Foundry has a history of offering opportunities for personal development to take our employees to their greatest potential. We are dedicated to career pathing through training and development programs that develop each individual. In 2020, Waupaca Foundry invested \$1,203,018 million in total training and employee development programs.



## SKILLS DEVELOPMENT *(Continued)*

### **Bridging the Skills Gap Among the Next Industrial Revolution Workforce**

As automation of the manufacturing industry continues, the need for skilled labor is growing and becoming imperative for the vitality of businesses. To develop talent from within, Waupaca Foundry offers tuition reimbursement programs, as well as a work-sponsorship program with local colleges where Waupaca Foundry has operations.

In 2020, many college students' graduations were jeopardized as the COVID-19 pandemic rocked the manufacturing industry, as they were unable to fulfill their work-based criteria due to businesses closing or cutting back sponsorships.

At Owensboro Community & Technical College, many students were left un-sponsored in the school's GO FAME program, the Greater Owensboro Chapter of KY FAME (Kentucky Federation for Advanced Manufacturing Education), at the beginning of the fall semester because of the lack of resources businesses faced.

A key part of the program is that students are interviewed by local employers to see if they are a good match for the position. Waupaca Foundry had just become a part of the alliance and was unable to interview students to sponsor. Once aware of the shortage of qualified workers and the gap actively being created by the pandemic, Waupaca Foundry took on all remaining students that needed sponsoring and continued to bring on more throughout the year.

The partnership between work-sponsorship programs and local businesses is a win-win situation for all involved. Students can gain the education and knowledge necessary to work at a higher level in today's manufacturing environment right out of college, and businesses can shape the talents and abilities of these students to fill current skills gaps and help prepare them for new career opportunities.



*GO FAME apprentice Adam Clark gains work experience at Plant 5, Tell City, Ind.*



## OCCUPATIONAL HEALTH & SAFETY

In January 2020, prior to most of the world knowing or being affected by COVID-19, Waupaca Foundry was already working to update its pandemic response plan. A team of 35 people across Waupaca Foundry's seven locations was assembled to help create a unified pandemic response. Beyond the internal team, WFI established relationships with its local government health agencies to stay up-to-date on regulations, mandates, and recommendations and guidance.

Because of the high surge in need for personal protective equipment (PPE), it became clear that throughout there would be shortages. Behind the scenes, Waupaca Foundry started to build up its supply of respirators as well as changed its respirator policy. While the previous policy stated that anyone who worked in the plant was able to wear a respirator, it was changed that only employees working with silica would be permitted to wear the respirators. Due to the company's quick reaction to the pandemic and Waupaca Foundry employee's commitment to the health and safety of one another, supplies at the plants were conserved efficiently and lasted throughout the shortage.

Starting March 13, 2020, Waupaca Foundry began releasing daily memos to its employees. In these memos, President, COO and CEO Mike Nikolai discussed what Waupaca Foundry was doing to keep everyone safe as well as to protect employees' jobs. Waupaca Foundry stayed consistent in sending updates even as the pandemic unfolded and new information was being released frequently by local, state and national governments.

Additional efforts inside Waupaca Foundry locations included a mask mandate and social distancing regulations. In limited instances where a 6-foot distance could not be maintained, the number of people working in that specific area was reduced to fit social distancing mandates.

Director of Safety and Health, Jon Loken said, "We are thankful for all of our employees taking their responsibilities to keep themselves and the communities they live in as safe and healthy as possible. It is due to their efforts that Waupaca Foundry had only eight confirmed cases where the illness was spread inside the workplace."



Robin Standke, occupational health nurse, made homemade hand sanitizers for her fellow employees.



## OCCUPATIONAL HEALTH & SAFETY CONTINUED

### Waupaca Team Makes a Difference During Pandemic

All Waupaca Foundry employees played an integral part in minimizing the spread of COVID-19 while continuing operations, and a few Waupaca Foundry employees went above and beyond to help keep their fellow colleagues safe and healthy.

Ariel Bartel, a tooling engineer technician at the company's ductile iron foundry in Etowah, Tenn., utilized the plant's 3D printers to make ear savers. With the incredible importance of wearing a mask comes the unfortunate uncomfortable feeling of the straps rubbing against the back of the ears during long periods of use and wear. Bartel was able to create improvements to a previous ear saver design to improve the hold and produced 60 ear savers for her peers at Plant 6.

Those same 3D printers were also used to print face shield frames for frontline workers. When the CEO of 3DOLOGiE, Waupaca Foundry's 3-D printer supplier, reached out to its customers hoping to make a small impact during the shortages of PPE, Waupaca Foundry was among 45 other companies to join relief efforts. Waupaca Foundry had a personal goal to make over 50 face frames for Blount Memorial Hospital in Maryville, Tenn., with two frames taking approximately 15 hours to finish.

In Waupaca, Wis., Kathy Hargett, senior programmer/analyst IBMi and EDI developer/coordinator of the company and an avid long-time sewer, realized just how important her pastime skill was. After experimenting with multiple mask patterns, she discovered a pattern that she could make quickly that also withstood daily wear and tear. With an average time of 20 minutes per mask, Hargett produced and donated almost 400 masks to the community.

Robin Standke, an occupational health nurse at Waupaca Foundry's Plant 1 location in Waupaca, Wis., saw a need for hand sanitizer and other cleaning supplies after orders were delayed and canceled. With this in mind, Standke turned part of her office into her own chemistry station. With the help of her coworkers, Jesse Spaeth, a safety facilitator at the plant, and Carolyn Moss, a fellow occupational health nurse, the trio made 150 bottles of hand sanitizer and 300 bottles of disinfectant spray. Their efforts were critical in helping reduce cross-contamination at communal cleaning stations.

Waupaca Foundry is grateful to all its employees for their efforts to help the company continue to operate at such high efficiency.

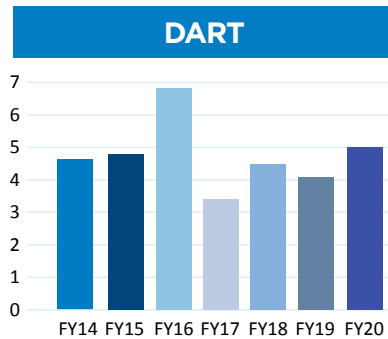
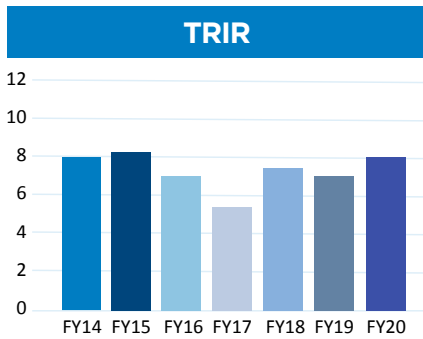


Ariel Bartel used the company 3D printer to supply hundreds of frontline workers with ear savers.



Jason Cardin, a tooling engineer in Etowah, Tenn., used the company's 3-D printer to produce face shield frames for Blount Memorial Hospital in Maryville, Tenn.

## SAFETY METRICS



The 2020 goal for our DART rate is 1.0 or less.

We did not suffer any fatalities during 2020. Waupaca Foundry works cooperatively with OSHA on risk-reduction initiatives for our industry.



## EMPLOYEE WELLNESS AND SUPPORT

In support of our commitment to improving the health of our employees, spouses and retirees, we continue to offer a progressive health and wellness program called Health Awareness Together (H.A.T.). Over the years, this program has dramatically contributed to the overall health and well-being of the team. The program has helped to reduce modifiable health risks while fostering positive cultural changes. Employees who elect to participate are not only rewarded with a higher quality and healthier lifestyle, but we offer financial incentives for participation as well.

We also offer an employee assistance program to support our employees and provide them assistance with personal concerns and the challenges of balancing work and personal life. The program is open to employees and their dependents, spouses or significant others, and others permanently residing in an employee's household whether they are related or not.



*Waupaca Foundry works hard to improve benefits for its number one resource.*

*Waupaca Foundry employee, Waupaca, Wis.*



## A CULTURE OF HARDWORKING TALENT

Together, all of our employee initiatives help us to develop and maintain a committed workforce that is as solid as the castings we create. Working together as a team with a shared vision allows each of our employees to say with pride, “I am Waupaca.”

“One of our key initiatives is to provide good jobs and career advancement so, together, we can best serve our customers and our community,” said Kirk Kallio, Waupaca Foundry director of human resources.





# Report Parameters and GRI Index

## REPORT PARAMETERS

This report updates our 2019 Sustainability Report and describes our activities during our 2020 fiscal year, covering the time period from April 1, 2020, through March 31, 2021. We intend to report on an annual basis with our fiscal year calendar.

The evaluation of topics to report to stakeholders in this Sustainability Report is focused on material aspects that align with the company's business objectives and our stakeholder needs and interests. We are reporting in accordance with the Core requirements of the Global Reporting Initiative (GRI) G4 reporting framework ([www.globalreporting.org](http://www.globalreporting.org)). See also our GRI Content Index.

We have chosen not to externally assure this report but may elect to do so in future years. This report covers all of Waupaca Foundry's U.S.-based manufacturing facilities.

Restatements of information and significant changes from the previous reporting period are addressed within the individual sections of this report.

We encourage [comments and feedback](#) on our report.



TRC Environmental Corporation (TRC) was retained to assist WFI with the development of this sustainability report to ensure consistency with the Global Reporting Initiative (GRI) Core requirements. TRC served as a consultant to the Sustainability Leadership Team, facilitating the assessment of materiality, analysis of sustainability metrics, and review of existing WFI targets and objectives.



## GRI CONTENT INDEX

General Standard Disclosures	Page(s)	External Assurance
<b>STRATEGY AND ANALYSIS</b>		
G4-1	3	No
<b>ORGANIZATIONAL PROFILE</b>		
G4-3	4	No
G4-4	4	No
G4-5	6	No
G4-6	5	No
G4-7	5	No
G4-8	22	No
G4-9	4	No
G4-10	41	No
G4-11	41	No
G4-12	26	No
G4-13	26	No
G4-14	12	No
G4-15	12	No
G4-16	16	No
<b>IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES</b>		
G4-17	N/A*	No
G4-18	14	No
G4-19	15	No
G4-20	15	No
G4-21	49	No
G4-22	49	No
G4-23	49	No
<b>STAKEHOLDER ENGAGEMENT</b>		
G4-24	16	No
G4-25	16	No
G4-26	16	No
G4-27	16	No
<b>REPORT PROFILE</b>		
G4-28	49	No
G4-29	49	No
G4-30	49	No
G4-31	49	No
G4-32	49	No
G4-33	49	No
<b>GOVERNANCE</b>		
G4-34	11	No
<b>ETHICS AND INTEGRITY</b>		
G4-56	12	No

\*Waupaca Foundry is a Hitachi Metals group company.

## SPECIFIC STANDARD DISCLOSURES

DMA and Indicators	Omissions	Page(s)	External Assurance
<b>ECONOMIC PERFORMANCE</b>			
G4-DMA*		20	No
G4-EC1		28, 29	No
G4-EC8		21	No
<b>MATERIALS</b>			
G4-DMA*		31	No
G4-EN1		32	No
G4-EN2		31	No
<b>ENERGY</b>			
G4-DMA*		33	No
G4-EN3		34	No
G4-EN5		35	No
<b>WATER</b>			
G4-DMA*		38	No
G4-EN8		39	No
G4-EN9		39	No
<b>EMISSIONS</b>			
G4-DMA*		35	No
G4-EN15		36	No
G4-EN16		36	No
G4-EN18		37	No
<b>RESOURCE EFFICIENCY (EFFLUENTS AND WASTE)</b>			
G4-DMA*		39	No
G4-EN23		40	No
G4-EN24		40	No
G4-EN25		40	No
<b>COMPLIANCE</b>			
G4-DMA*		39	No
G4-EN29		40	No
<b>EMPLOYMENT</b>			
G4-DMA*		42	No
G4-LA2		47	No
<b>HEALTH AND SAFETY (OCCUPATIONAL AND CUSTOMER)</b>			
G4-DMA*		45	No
G4-LA6	Partial LA6 – Not reporting by gender or region.	44, 45	No
<b>TRAINING AND EDUCATION</b>			
G4-DMA*		44	No
G4-LA9	Partial LA9 – Not reporting by gender or region.	43	No
G4-LA11	Partial LA1 – Not reporting by gender or region.	41, 43	No

\*Specified content begins on listed page number