



TENNECO

MAKING TOMORROW BETTER:
2020 SUSTAINABILITY REPORT

Reporting Period: January 1, 2020 to December 31, 2020

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About This Report

We have prepared this report in accordance with the Global Reporting Initiative (GRI) Standards core option and cover metrics within the Sustainability Accounting Standards Board (SASB) Auto Parts Industry Standards. This third annual Sustainability Report incorporates our newly defined material topics and strategy framework, updated since our last report published in September 2020. The report covers our performance from January 1 to December 31, 2020, unless otherwise stated. We welcome feedback at Sustainability@tenneco.com.

We do not currently seek third-party assurance of report data; an Internal Audit Department (IAD) advisory assessment was conducted to review the sustainability report data for our SASB metrics to assess the business unit and corporate processes and determine if the controls operate at a level of precision sufficient to identify material errors or omissions.

The global COVID-19 pandemic significantly affected our operations at Tenneco during 2020. We enabled a portion of employees to work from home, and we paused production at various facilities throughout the year. Because of these impacts, our 2020 performance metrics do not reflect normal operations.

This report includes forward-looking statements. Please refer to our Annual Report on [Form 10-K](#) and subsequent quarterly reports on [Form 10-Q](#) and other filings with the U.S. Securities and Exchange Commission (SEC) for information regarding the risks and uncertainties that could cause our results to differ materially.

Suggested Links

[2020 10-K](#)

From the CEO

Welcome to Tenneco's 2020 Corporate Sustainability Report, where we would like to share the major progress and increased achievements that show how we, even in these continued challenging times, are Making Tomorrow Better.

Because of the COVID-19 pandemic, 2020 was a difficult year for almost everyone. Despite all the challenges we faced, Tenneco remained steadfast in our commitment to the safety of our global team members, while continuing to improve our ability to operate our business in a sustainable, responsible manner.

The COVID-19 pandemic not only changed the way we do business, but severely impacted our team members, customers, stakeholders

and the communities around us. To support those affected, our team members across the globe engaged in many different activities – from decorating holiday trees and placing them outside a hospital to cheer first responders, to partnering with local agencies to distribute food baskets to families, to even supporting our customers who shifted manufacturing to make ventilators and masks with critical components — Team Tenneco mobilized to help in many ways. Internally, we launched the Healthy Team, Healthy Tenneco initiative to promote healthy practices to encourage not only sound physical health, but also the mental well-being of our team members. Even now in August 2021, as we are slowly adjusting to a new normal, we are doing everything possible to continue our established COVID safety protocols to ensure that our team members return home at the end of the day healthy and safe.

Beyond COVID, we saw a 19% reduction in our Incident Rate in one year, proving that our increased safety programs and measures are taking hold.

Over the last few years, the call for urgent action with regard to climate change has grown louder. Tenneco is committed to help protect our environment by working continuously to reduce the use of energy and other natural resources in our operations worldwide. In 2020, we reported a 4.8% reduction in energy intensity, and a 2.9% reduction in greenhouse gas emissions intensity versus 2019. As part of this commitment, in 2020, we completed a materiality assessment to identify our most important sustainability topics and prioritized these issues based on internal and external stakeholder input; developed a framework to align our strategic approach to sustainability and focus our efforts on our key impacts; and established new goals that will drive our performance.

Inclusion and diversity continues to be a key priority for Tenneco. Our customers recognize us for our progress to maintain a diverse supply base, yet we know we can, and should, do more — particularly in light of the social justice initiatives we witnessed throughout the year. In 2020, we established Tenneco's IDEA Board (Inclusion, Diversity, Equity and Action) to develop and assist the company's efforts to engrain the values of inclusion, diversity and equity into the fabric of our culture. In this report, I am proud to share the progress we have made in a short amount of time, ranging from hiring a new vice president to lead this important initiative, to celebrating diversity throughout Tenneco, to creating a new set of diversity goals that we look to achieve by 2030.

“Sustainability is an integral part of our strategy and operations. We consider it part of holistic operating excellence and our corporate value to Make Tomorrow Better.”

Good governance, risk management and managing our business impact remain top priorities as well because we know it is the right thing for our company and our strategy. We have restructured the executive leadership team with additional roles and responsibilities specifically to address this focus, and we look forward to continuing to grow in this area.

In summary, Sustainability is an integral part of our strategy and operations. We consider it part of holistic operating excellence and our corporate value to Make Tomorrow Better. We are proud that many of our products contribute to reduced emissions and that we are providing solutions for global mobility markets - today and tomorrow. And, we've been recognized for our progress in the past and are excited about the results that will be delivered with the increased focus and resources we are dedicating, ranging from

inclusion and diversity to CO₂ emissions reduction.

I would like to thank each of our global team members, whose dedication—even during the most trying times—drive the continued success of the company. We emerged from 2020 a stronger Tenneco, and this is in no small part due to our teams' efforts and ability to adapt, collaborate and innovate.

Thank you for taking the time to read Tenneco's sustainability story.



Brian Kessler
Tenneco CEO



2020 Highlights

As we continue to advance our sustainability efforts and measure our improvement, we are proud to report our 2020 accomplishments and share our progress with our stakeholders. Our 2020 performance highlights include:

- ✓ We conducted a formal materiality assessment, developed a strategy framework, established an ESG council and set new goals to enhance sustainability at Tenneco ([see page 6](#)).
- ✓ Through our efficient response to the COVID-19 pandemic, we launched our Healthy Team, Healthy Tenneco program to foster healthy practices related to both physical and mental well-being.
- ✓ Our annual survey reflected significant increases in team member engagement and appreciation of communication from leadership.
- ✓ We launched our IDEA Board to promote inclusivity in our culture, engage in thoughtful dialogue, and lead our strategy to attract and support diverse talent.

Our People



19.4%
reduction in incident rate



16%
of U.S. team members are ethnically diverse¹




23%
of team members are women




48%
Manufacturing sites certified to ISO 45001 Health & Safety Management System

¹ Native Hawaiian or Other Pacific Islander/Asian/Hispanic or Latino/American Indian or Alaska Native/Black or African American/two or more races.


Our Planet




4.8%
reduction in energy intensity²



2.9%
reduction in greenhouse gas emissions intensity (Scope 1 and 2)²



3.7%
reduction in waste intensity^{2,3}



81%
Manufacturing sites certified to ISO 14001 Environmental Management System

² Intensity normalized by total revenue.

³ Performance Solutions and Clean Air business units only.

Our Products



30+
world-leading brands



15
brands are 100+ years old



41%
of revenue from products that contribute to fuel efficiency and/or emission reduction⁴



97%
Manufacturing sites certified to IATF 16949 Quality Management System

⁴ This reflects Clean Air and Powertrain segments only.

Our Governance




10
Board members⁵



9
independent directors and 1 independent chairperson⁵



30%
of Board members are women⁵



10%
of Board members are ethnically diverse^{1,5}

⁵ As of 12/31/2020.

Our Sustainability Journey

Stakeholder Engagement

We value regular communication with our stakeholders, including team members, customers, investors, communities, suppliers, government and regulatory agencies and trade associations. These dialogues help maintain positive relationships with stakeholders and provide essential input into our sustainability reporting process. In 2019, we conducted a cross-functional survey and a workshop to assess how we engage our stakeholders. [See Appendix C](#) for a summary of our engagement activities with key stakeholders, including the frequency of our engagements and relevant topics.

Materiality Assessment

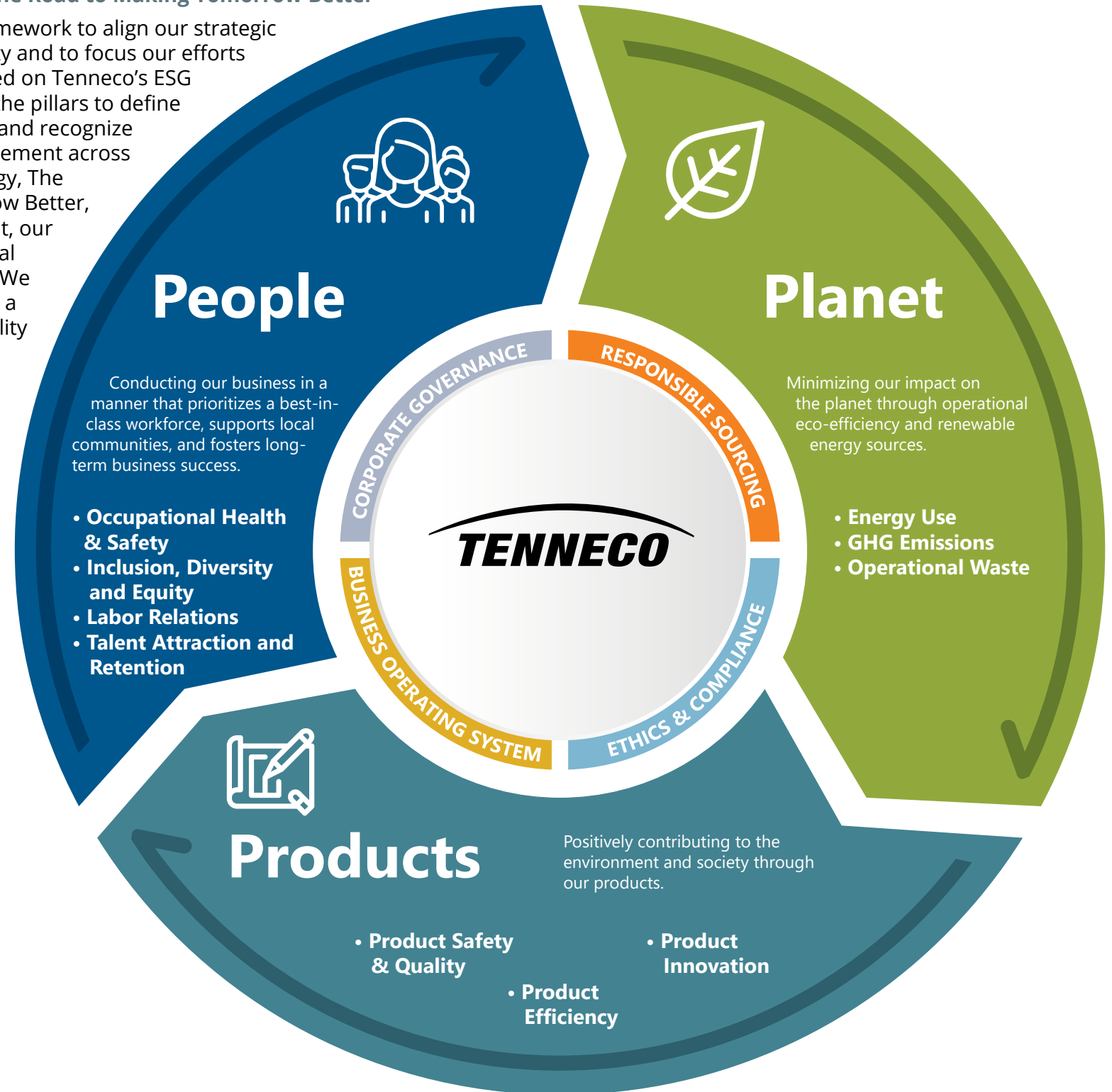
In 2020, we engaged a third party to perform a materiality assessment to identify our most important ESG topics and prioritize these issues based on internal and external stakeholder input. For our materiality assessment, we used the Global Reporting Initiative (GRI) definition of materiality, which includes topics that reflect the reporting organization's significant economic, environmental and social impacts, or substantively influence the assessments and decisions of stakeholders. As part of this process we:

- Conducted industry research and peer benchmarking to define the relevant issues;
- Interviewed internal and external stakeholders and performed desktop research to understand topics of significance;
- Prioritized our topics based on the importance to Tenneco and to external stakeholders; and
- Refined the results through a validation workshop with Tenneco leaders.

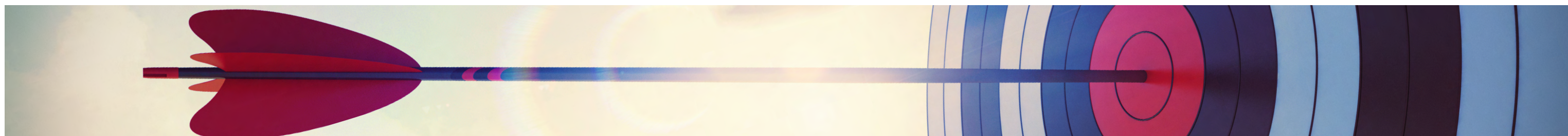
The results of the assessment are shown in [Appendix D](#) in alphabetical order.

Strategy Framework: The Road to Making Tomorrow Better

We also developed a framework to align our strategic approach to sustainability and to focus our efforts on our key impacts. Based on Tenneco's ESG priorities, we organized the pillars to define our future performance and recognize opportunities for improvement across our business. Our strategy, The Road to Making Tomorrow Better, reflects stakeholder input, our material topics and critical elements of our culture. We continue to operate with a foundation of responsibility and accountability as we implement our strategy to generate positive impacts related to People, Planet and Products.










Our Sustainability Journey (continued)



Sustainability Goals

To guide our strategy, we established goals that will drive our performance. These goals incorporate our baselines and offer opportunities to create measurable impacts, which we believe can be a competitive advantage.

Tenneco's Sustainability Goals

Material Topic	Goal
 Inclusion, Diversity and Equity	<ul style="list-style-type: none"> • Increase gender diversity to One Third females globally at manager level and above by 2030. • Increase U.S. minority group representation to One Third at manager level and above by 2030.
 Greenhouse Gas Emissions	Reduce Scope 1 and Scope 2 GHG emissions intensity by 30% by 2030 from a 2019 baseline.
 Energy Use	<ul style="list-style-type: none"> • Decrease operational energy demand by 10% by 2030 from a 2019 baseline. • Source 15% more renewable energy by 2030.
 Operational Waste	Reduce waste to landfill by 20% by 2030 from a 2021 baseline.
 Product Safety and Quality	Achieve 100% certification with IATF 16949, ISO 9001 or other applicable quality management standards for manufacturing sites by end of 2025 to standardize quality governance.
 Supplier Management	<ul style="list-style-type: none"> • 100% of strategic partners reaffirm their commitment to the Tenneco Code of Conduct by end of 2022. • 100% of Tenneco's top sustainability "high-risk" and/or "high-impact" suppliers complete a self-assessment questionnaire by end of 2022.
 Conflict Minerals	Develop a strategy by 2024 to phase out, where possible, 3TG smelters and refiners nonconformant with RMI in the supply chain.

Next Steps on our Journey

To more fully embed sustainability into our culture, the next step in Tenneco's Environmental, Social and Governance (ESG) journey will be to operationalize the ESG goals and implement systems and metrics to better track and assess ESG progress. Additionally, we audited select metrics internally and are exploring assurance for future reports.

Moving forward and building on this report, Tenneco is committed to:

- Improving our ESG strategy, including key performance metrics;
- Actively sharing best practices internally and externally;
- Exploring Sustainability Accounting Standards Board (SASB) and other reporting frameworks to determine how to drive long-term stakeholder value;
- Embracing continuous improvement and evaluating program effectiveness; and
- Reporting our progress against future goals and objectives.

Our Company



We are committed to helping our customers, team members and communities build a sustainable future. This focus includes a formal policy that outlines Tenneco's commitment to enabling a healthier and more productive world, and building a sustainable future.

Sustainability is at the core of our strategy and operations and supports our corporate value to continually Make Tomorrow Better. We are proud that we are providing solutions for global mobility markets - today and tomorrow.

Skip to:







[Tenneco Overview](#)

[Tenneco Values](#)

[2020 Awards and Honors](#)

[Responding to COVID-19](#)

Tenneco Overview

 73K team members	 \$15.4B in revenue	 201 manufacturing sites
 33 aftermarket distribution centers and warehouses	 39 globally networked engineering and technical centers	 30+ widely known and respected automotive brands

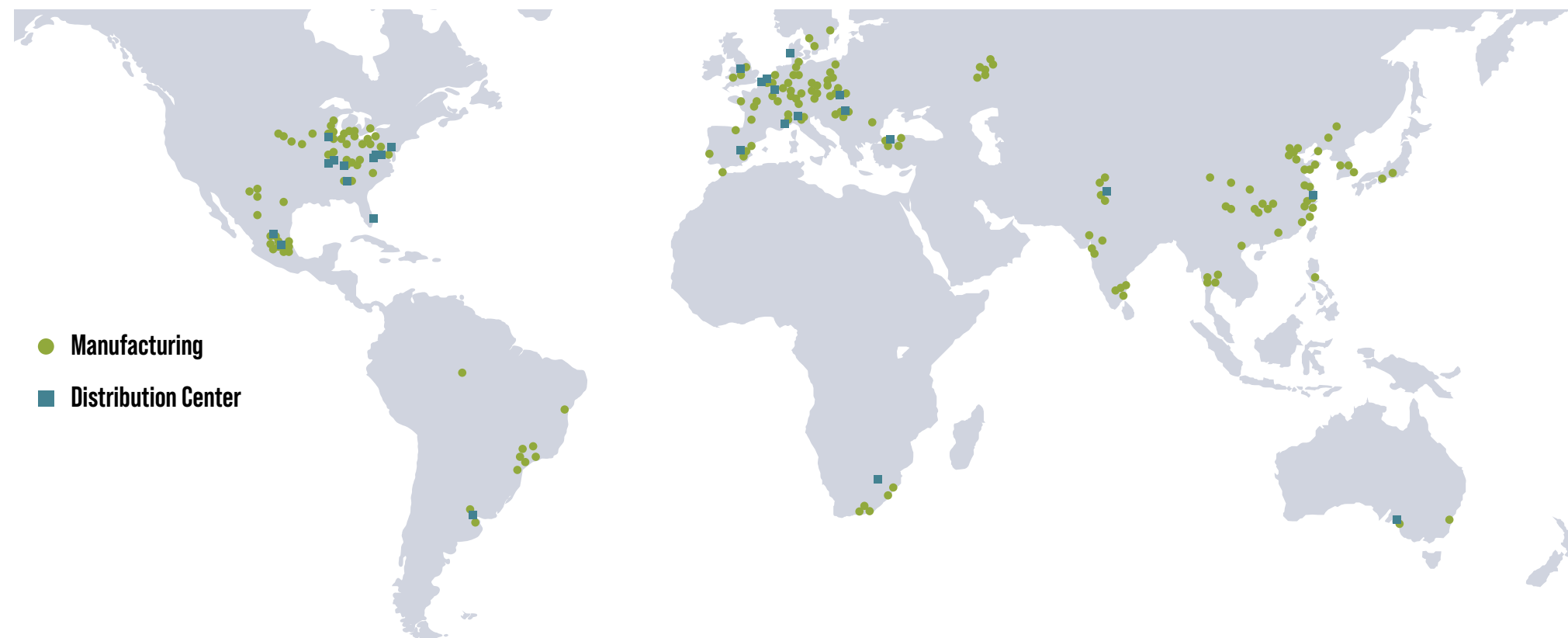
Tenneco (NYSE: TEN) is one of the world’s leading designers, manufacturers and marketers of automotive products for original equipment (OE) and aftermarket customers, with full-year 2020 revenues of \$15.4 billion and approximately 73,000 team members¹ working at more than 270 sites worldwide. Tenneco is driving advancements in global mobility by delivering technology solutions for diversified global markets, including light vehicle, commercial truck, off-highway, industrial, motorsport and the aftermarket. Tenneco consists of four operating segments: Motorparts, Performance Solutions, Clean Air and Powertrain.

Today, Tenneco is a proud steward of more than 30 of the industry’s most widely known and respected automotive brands. We’re one company, made up of four diverse and complementary business groups – Motorparts, Performance Solutions, Clean Air and Powertrain – each with their own rich heritage, strong identity and distinct value proposition.

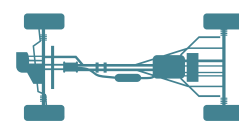
We serve our global aftermarket and original equipment customers with design, engineering, manufacturing and distribution capabilities, an advantaged global end-to-end supply chain and a portfolio of market leading brands, products and technologies.

Tenneco is primed to enter the future as a solutions provider that is known for “Driving Advancements in Global Mobility” and providing solutions for cleaner, more efficient, comfortable and reliable performance. We are also committed to supporting the market transition within the automotive industry to alternative fuels and the global adoption of electric vehicles.

Our Global Presence

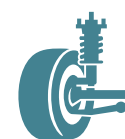


Our Business Segments



Motorparts

- Designs, manufactures, sources, markets and distributes a broad portfolio of leading brand-name products in the global vehicle aftermarket while also servicing the original equipment service (OES) market.
- Motorparts products are marketed and sold under industry-leading brand names including Monroe®, Champion®, Öhlins®, MOOG®, Walker®, Fel-Pro®, Wagner®, Ferodo®, Rancho®, Thrush®, National®, Sealed Power® and others.



Performance Solutions

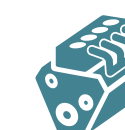
(formerly Ride Performance)

- Designs, manufactures, markets and distributes a variety of ride performance solutions and systems to a global OE and aftermarket customer base.
- Includes noise, vibration and harshness performance materials, advanced suspension technologies, ride control, systems protection and braking.



Clean Air

- Designs, manufactures and distributes a variety of products and systems designed to reduce pollution and optimize engine performance, acoustic tuning and weight.
- Supports light vehicle, commercial truck and off-highway customers.

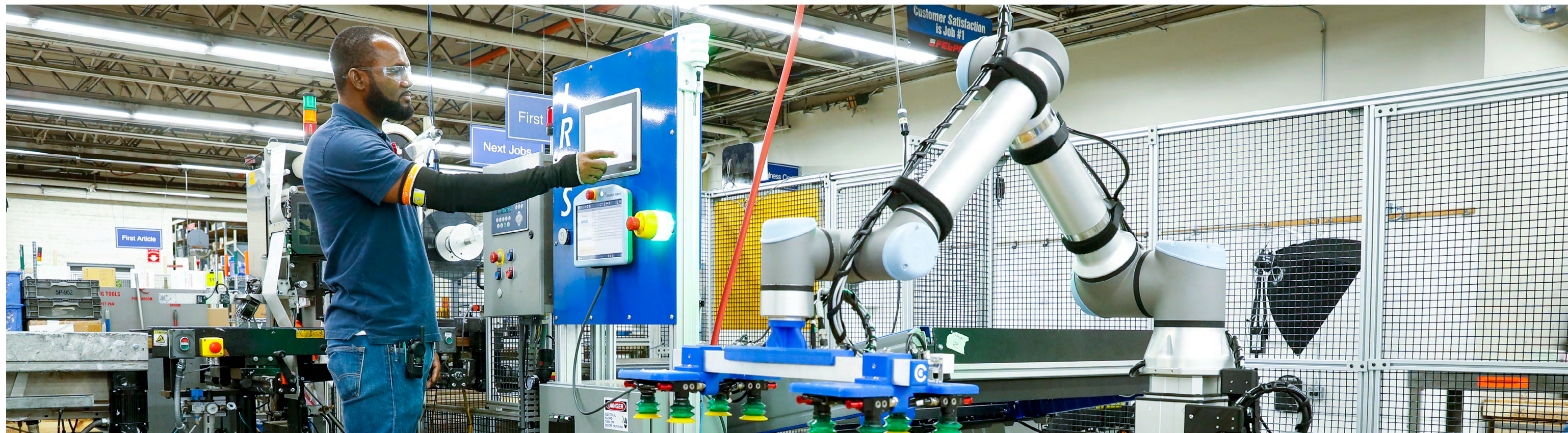


Powertrain

- Designs, manufactures and distributes a variety of OE powertrain products for light vehicle, commercial truck, off-highway and industrial applications.
- Supports customers for use in new vehicle production and OES parts to support their service and distribution channels.

¹As reported in the 2020 10K.

Tenneco Values



We cultivate a winning culture based on our core values that guide our thinking, behaviors and success. By committing to these values, we pledge to maintain accountability and preserve our stakeholders' trust as we drive our business forward. Our core values reflect our dedication to lead with Integrity Always, to act as One Team, to produce solutions that Make Tomorrow Better, and to perform with a Will to Win. Together, we create a stronger Tenneco through our dedication to upholding these values and achieving operational excellence.



Integrity Always

- Do the right thing the right way
- Speak up
- Own it



One Team

- Take care of each other
- Embrace our differences
- Succeed together



Make Tomorrow Better

- Turn problems into solutions
- Create what's next
- Passion to learn



Will to Win

- Seek flawless execution
- Create customer fans
- Make a difference

2020 Awards and Honors



Company

- Compliance Week Magazine – Compliance Program of the Year

Motorparts

- Aftermarket Auto Parts Alliance 2020 Auto Value and Bumper to Bumper Receiver's Choice Award
- Automobile and Parts Most Influential Aftermarket Brand - Champion®
- Carzone Customer Award for Top Suppliers for 20 Years Partnership
- Women in Auto Care Communications Awards for Excellence
- Webby Award for Best Websites: Car Sites and Car Culture
- PACCAR Award for Best-in-Class Quality and Service

Performance Solutions

- PACCAR Global Quality Award
- PACCAR Award for Best-in-Class Quality and Service
- Honda Supplier Award Öhlins Racing
- General Motors Supplier Quality Excellence Award

Clean Air

- FAW-Volkswagen Award
- General Motors Supplier Quality Excellence Award
- PACCAR Award for Best-in-Class Quality and Service

Powertrain

- General Motors Supplier of the Year Award
- Automotive News PACE™ Award for IROX® 2 Bearing Technology
- General Motors Supplier Quality Excellence Award
- Volvo Quality Excellence Award – Qingdao, China
- PACCAR Global Quality Award

Responding to COVID-19

At Tenneco, we say that our driving force is our people—a team of passionate and determined individuals dedicated to helping us deliver on our commitments to our customers. That determination was tested in ways we never expected when the pandemic hit. By March 2020, our pledge to our team's safety and our support for the customers that depend on us reached a whole new level.

Stage 1: An Unknown Virus Emerges (December 2019)

Prior to the COVID-19 pandemic, our company developed a pandemic response plan to help us prepare for a global health emergency. The plan included detailed strategies for continuity planning, workforce safety and customer protection. When our Tenneco team in Wuhan, China first experienced the health crisis in late 2019, our teams throughout China quickly escalated our response to match the sudden disruption to our operations.

Stage 2: COVID-19 spreads out of China and pandemic unfolds; public health measures are implemented; health systems struggle under pressure (March 2020)

As the virus spread globally, Tenneco's Pandemic Response Team immediately issued guidance to all team members globally to address the wide-ranging questions that everyone had about health and hygiene, travel and remote work. The Pandemic Response Team held daily reviews to stay on top of the ever-changing situation, established robust communications channels such as the COVID-19 Update Center, and consistently cascaded information to our teams.

For those working in plants supporting our customers—part of the essential workforce needed to maintain critical transportation and logistics infrastructure—we took immediate steps to limit exposure to the virus. These measures included physical barriers, social distancing requirements, temperature screening, rigorous sanitizing protocols, good hygiene practices, indoor space capacities, internal assessment tools, and established personal protective equipment (PPE) requirements. We limited travel to essential trips only and implemented strict visitor policies for all locations. Tenneco established best practices that were recognized by customers, suppliers, local governments, and industry associations for COVID-19 prevention and control methods.

Tenneco provided innovative solutions to aid in the U.S. response to the pandemic. We supplied products used in GM's production of ventilators to address the U.S. shortage of important medical devices to help COVID-19 patients and developed a process for manufacturing non-medical-grade face coverings for the North American market.



We recognized that we were all in this together, and the Tenneco team helped to support the communities in which we operate. Our teams organized donations of food and sanitation supplies to help people in need. We also helped hospitals and first responders by donating PPE to those on the front lines of the pandemic and oximeters to employees in areas where the hospitals were stressed.

Stage 3: Pandemic accelerates and impacts the entire globe (July 2020)

In response to acceleration of the pandemic, Tenneco launched an awareness campaign called Healthy Team, Healthy Tenneco focused on promoting good health practices—inside and outside the workplace—among Tenneco's team members, families and communities. As part of the program, we shared testimonials from team members to help everyone understand the importance of following safety protocols. We provided communication tools such as flyers, posters and animated videos in multiple languages to support our diverse, global population.

Stage 4: Mis/dis-information complicates the multifaceted pandemic (November 2020)

Since mental health is as essential as physical health, the Healthy Team, Healthy Tenneco program also directed team members to resources for emotional well-being, coping with seasonal depression and helping those working from home deal with work/life balance issues.

Stage 5: Vaccine development accelerates; new variants emerge (December 2020)

Recognizing that business leadership will be crucial to the long-term recovery from the pandemic, Tenneco assembled a COVID-19 Vaccine Task Force to advise our leadership team on COVID-19 vaccines. The mission of the task force is to support our teams and their families—helping in any way we can—to get vaccinated.

To help team members understand the science behind the vaccines and learn about their safety and efficacy, we launched Healthy Team, Healthy Tenneco educational materials and a video series using content provided by the World Health Organization, available in multiple languages. We started an #IGotMyShot campaign to encourage our teams to become immunized once a vaccine was available to them; our leaders were quick to demonstrate their confidence in the vaccines. When and where possible, Tenneco hosted vaccination events for our team members, many of whom qualified for early vaccinations as essential workers.

Our Planet



Minimizing our impact on the planet through operational eco-efficiency and renewable energy sources.

Throughout our operations, we strive to protect our planet and limit environmental impacts as part of our commitment to responsible production. We focus on efficiently managing our energy consumption, emissions, operational waste and water usage to reduce our environmental footprint.

Skip to:

[Energy and Greenhouse Gas Emissions](#)

[Operational Waste and Water](#)



Energy and Greenhouse Gas Emissions

Our environmental strategy for our facilities focuses on reducing energy consumption and evaluating opportunities to incorporate renewable energy into our operations. We recognize our responsibility to reduce our contribution to climate change, and we continue to assess our strategy to mitigate climate-related risks. As a global organization with a significant footprint, we will demonstrate leadership and meet stakeholder expectations by targeting improvements in energy efficiency and limiting emissions at our sites.

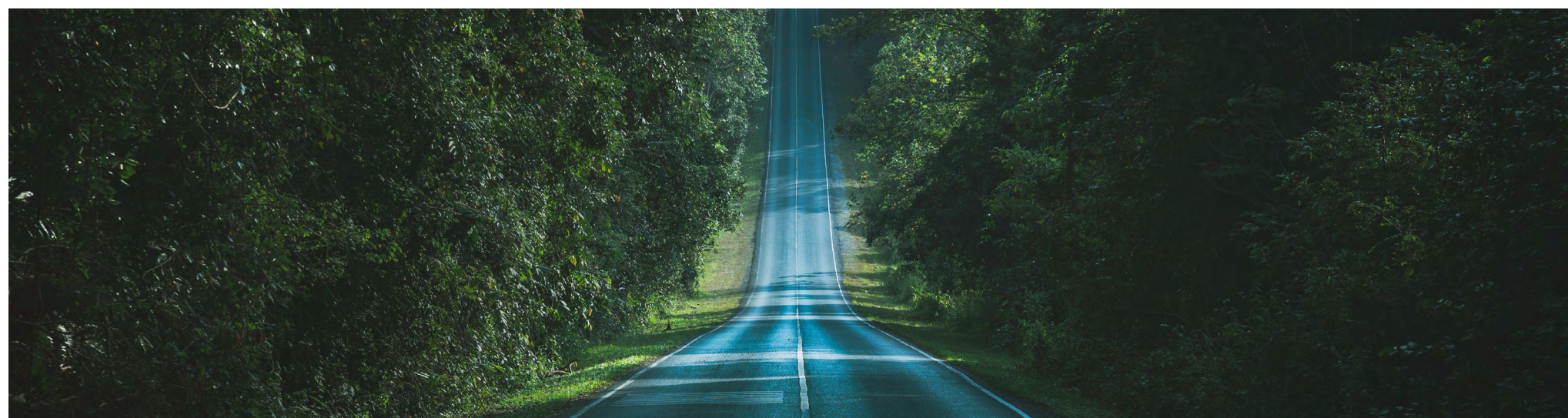
Management Approach

Our Focus

We focus on continuous improvement across our organization to target new opportunities for reducing our environmental impacts and preventing pollution in accordance with regulations. We recently established new sustainability goals in 2021 to reduce our environmental footprint and drive our strategic impacts:

Material Topic	Goal
 Greenhouse Gas Emissions	Reduce Scope 1 and Scope 2 GHG emissions intensity by 30% by 2030 from a 2019 baseline.
 Energy Use	<ul style="list-style-type: none"> Decrease operational energy demand by 10% by 2030 from a 2019 baseline. Source 15% more renewable energy by 2030.

Teams and business units across the company collaborate to achieve our goals for energy management and emissions reduction. In 2019, Tenneco formed a cross-functional ESG Council that advises management periodically on progress. The ESG Council is comprised of functional leaders of Environment, Health & Safety, Compliance & Ethics, Human Resources & Talent Management, Finance, Engineering, Supply Chain and Logistics. The Council leads Tenneco's approach on energy management and emissions reduction. At the front line, global operation teams maintain responsibility for energy management activities. Our energy contracts, energy efficiency improvement projects, and collection of Scope 3 data are all managed by our real estate, facilities, and industrial procurement departments. Our EHS and corporate security teams coordinate our certified management systems, collect energy usage, and track emissions data to support reporting efforts. As we pursue our renewable energy goals, we are also upgrading our reporting systems to report on renewable energy programs across the company.



Environmental and Energy Management Systems

To align with best practices, we manage our global manufacturing sites in accordance with the ISO 14001 Environmental Management System standard and ISO 50001 Energy Management System standard. These frameworks provide guidance to improve our management efforts and validate our approach through certifications. As of 2020, 81% of our global manufacturing sites are certified to the ISO 14001 Environmental Management System standard and 16% of our global manufacturing sites are certified to the ISO 50001 Energy Management System standard. It is our long-term vision that all our manufacturing sites would be certified to these or similar external standards.

Initiatives

In 2020, we completed multiple projects to target energy efficiency improvements in our facilities. We also adjusted our collective approach to renewable energy by beginning to implement a central tracking system to collect data about our energy sources. Across our business units, we continue to update our processes and analyze the results of our projects. In 2020, various sites converted to LED lights, optimized ventilation systems, further implemented pre-insulating underground heat piping and installed new burners for furnaces. In addition, we encourage our plants to participate in the [Energy Star Treasure Hunt](#), which engages team members to seek opportunities to further save energy.



81%

ISO 14001 Environmental Management System Certification

Performance

We report on our environmental performance through the CDP Climate Change questionnaire and measure our progress through multiple indicators, including our energy consumption, the percentage of energy from renewable sources, our reduction in energy use and our reduction in greenhouse gas emissions intensity versus a 2019 baseline. For more information, please see our [2020 CDP response](#).

Our 2020 metrics reflect continuous improvement, but we do acknowledge that 2020 was an extraordinary year due to the impacts of the COVID-19 pandemic. We will work to focus on reductions from our 2019 baseline year in alignment with our goals.

Metrics

GHG Emissions

2.9% Reduction in GHG Emissions Intensity vs. 2019 Baseline



GHG Scope 1 and Scope 2 Emissions Intensity (mt CO₂e/\$M Revenue)

Energy Use

4.8% Reduction in Energy Intensity vs. 2019 Baseline



Energy Intensity (Gigajoules/\$M Revenue)

See [Appendix A](#) for additional data.

Operational Waste and Water

Operational Waste

As a global business, we have an extensive footprint and directly affect local communities through our sites. We strive to be responsible stewards of our environment by reducing our resource consumption and waste productions. To mitigate risks of pollution, landfill runoff and other negative impacts from waste, we have established processes to target our waste generation and improve our management efforts across our business units.

Management Approach

Strategy

Through our environmental management system, we track our diverse waste streams to identify opportunities to reduce resource consumption, reuse materials where feasible, and increase recycling efforts. We recently set new enterprise-wide goals in 2021 to reduce operational waste further and drive our strategic impacts:

Material Topic	Goal
 Operational Waste	Reduce waste to landfill by 20% by 2030 from a 2021 baseline.

We have engaged in projects that address our waste generation and provide tangible benefits for Tenneco in the form of cost savings. For example, we improved our process for closing sites. Previously, we closed a site by scrapping the materials, but now we provide a redeployment asset zone to sell products for reuse and prevent waste from reaching the landfill. We also implemented other initiatives in 2020, such as reusing scrap and modernizing waste storage areas for aluminum chips for more effective waste management. In addition, our Clean Air business unit's landfill reduction initiative from 2017 to 2020 achieved approximately \$1 million in savings through waste segregation and ongoing training.

Performance

Metrics

Total amount of waste from manufacturing, percentage recycled and percentage hazardous¹

94,367 Metric Tons	39.1% Recycled	11.9% Hazardous
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¹2020 Data does not include Powertrain business unit. We continue to improve processes for collecting and reporting data

3.7% Reduction in Waste Intensity vs. 2019 Baseline²



Waste Intensity (Metric Tons/\$M Revenue)

²Performance Solutions and Clean Air business units only.



The Road to Making Tomorrow Better: Waste to Recycling at Glasgow, Kentucky

In 2020, we improved our dust recycling efforts at the Glasgow, Kentucky production site to reduce our waste to landfill. Slabs of raw materials produced dust during the cutting and grinding process, which was then collected and recycled back into the process or sent to an external partner. This initiative has significantly reduced the amount of dust that was sent to the landfill.

Waste & Recycling (tons)



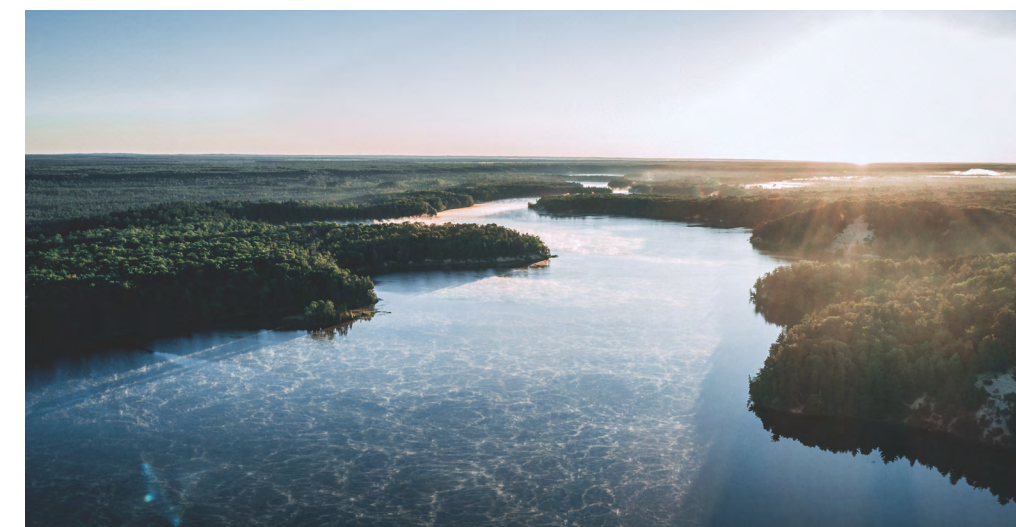
Waste to Landfill



Waste to Landfill as Dust (tons)



³We acknowledge that 2020 metrics were partially impacted by a slowdown in production due to the COVID-19 pandemic



Water

We aim to be responsible consumers of water by considering water-related impacts into our strategy. We recognize that access to water can become limited in certain locations. We work to optimize our overall environmental footprint by including water-related risks in our assessments and identification of improvements. In 2019, we set a 3% water reduction goal by 2021 from a 2018 baseline. Since 2018, we have achieved a 4.2% reduction in water intensity.

In 2020, we continued to implement ongoing projects that promote water conservation and water treatment. These initiatives have included implementing controllers to reduce water flow during idle times, improving processes to support effective waste water treatment and reuse, installing hydrometers to monitor consumption, enhancing structures to maintain water quality and providing efficient water faucets.

Performance

Metrics

4.2% Reduction in Water Intensity vs. 2018 Baseline (Megaliters/\$M Revenue)



Water Intensity (Megaliters/\$M Revenue)

See [Appendix A](#) for additional data.

Our People



Conducting our business in a manner that prioritizes a best-in-class workforce, supports local communities and fosters long-term business success.

Our team members are the source of our leadership and the driving force behind our innovation. Their health and safety remains our top priority, and we recognize the risks of operating in manufacturing facilities. We also strive to retain the most skilled talent by continuing to promote their well-being, fostering an inclusive environment and providing opportunities to grow and develop their careers. In 2020, we enhanced resources for our workforce during a difficult year as we continued to improve our strategy and support our team members.

Skip to:

[Occupational Health and Safety](#)

[Talent Attraction and Retention](#)

[Inclusion, Diversity & Equity](#)

[Labor Relations](#)

[Community Involvement](#)

Suggested Links:

[Health & Safety Policy](#)

[Basic Working Conditions Policy](#)

Occupational Health and Safety

The health and safety of our workforce is at the forefront of our business. The COVID-19 pandemic presented many challenges and reinforced the importance of providing a safe work environment. We continuously strive to improve our health and safety strategy through risk management and hazard mitigation. Our commitment to the health and safety of Tenneco team members applies to all our locations and every level of the organization.

Management Approach

Our Standards

In alignment with our Tenneco values and our [Environmental, Health and Safety \(EHS\) Policy](#), we commit to comply with all EHS regulations and requirements. Our EHS policy was updated in 2020 to emphasize greater alignment with our core values and will be launched across Tenneco in 2021. The EHS policy communicates our commitment to all team members and unites our focus as One Team.

To drive our operations, our occupational health and safety management system aligns with ISO 45001 or Occupational Health and Safety Assessment Series (OHSAS) 18001. These management systems cover all workers, including full-time and temporary team members, contractors and visitors. Our health and safety management systems are audited in accordance with the standards to verify conformance. We strive for 100% of our manufacturing sites to be certified to either ISO 45001 or OHSAS 18001, and we have achieved certification for 48% of sites so far. Conformance to these international standards sets the foundation for our teams to engage in continuous improvement, identify hazards, mitigate risks, and implement corrective and preventive actions.

Throughout our process, we strive for zero work-related injuries and illnesses by continuously improving our approach to health and safety. All safety incidents are required to be reported to ensure that we review opportunities to improve performance and prevent incidents from reoccurring. We continue to proactively enhance our safety program with the aim to contribute to a better tomorrow.

Hazard Identification and Mitigation

We employ our health and safety management systems to streamline the process for risk prevention, data collection, action planning and global communication across the organization. We have an established hazard identification process to evaluate risks that may arise during our work activities. If an incident occurs, we conduct incident investigations that focus on root cause analysis, corrective and preventive action plans, and share lessons learned and best practices across the company.



The Road to Making Tomorrow Better: Implementing Our Hand Safety Program

Hand injuries remain the main type of work-related injuries in our operations. We launched our Hand Safety Program in 2019 to prevent various types of hand injuries and have implemented it across two business units. This program provides locations with a six-week introduction platform for team members to assess shop floor activities. We improved hand safety by providing a knowledgeable training team, engaging team members to understand the hand safety principles and communicating across the business to build confidence and encourage improvement. We look forward to the continued rollout and expansion of the program.

The Hand Safety Program reduced recordable hand injuries by 61% from 2019 to 2020 for the Performance Solutions and Motorparts business units. Hand injuries also decreased from 54% of recordable injuries in 2019 to only account for 42% of recordable injuries in 2020.

Number of hand injuries for the Performance Solutions and Motorparts business units



The continuous improvement of our health and safety program depends on our ability to operate as One Team. We consult and engage with our team members to improve the success of our health and safety program. We regularly communicate goals, update our teams on our key performance indicators, collaborate and share observations between business units. In addition, our team members contribute to incident and near-miss reporting and investigation.

Our Life-Saving Elements program aims to incorporate a risk-based approach to reduce team member exposure to potential life-changing events at work. Through Life-Saving Elements, we provide operational guidelines for risk prevention and maintain accountability for following these procedures. Our Life-Saving Elements continue to provide the tools needed for risk evaluation, training and awareness in support of protection for our team members.

Impacts from COVID-19

In 2020, our planning improvements and health and safety management focused mainly on mitigating the risks associated with the COVID-19 pandemic. We significantly updated our emergency plans to promote worker safety, limited exposure risks throughout our operations and introduced additional cleaning and sanitation protocols. We created the COVID-19 Update Center to provide team members with updates related to the pandemic, and also offered an educational series about health impacts, with sessions on stress management, working from home and safely traveling for the holidays.

To support our team members during this challenging year, we created Healthy Team, Healthy Tenneco. This management program was developed in response to the COVID-19 pandemic, but we plan to implement the initiative as a formal, lasting program that will facilitate access to supportive health materials and services. During 2020, this program included health screenings and testing, as well as surveys about stress and wellness. By emphasizing the health impacts and needs of our team members during the pandemic, Healthy Team, Healthy Tenneco provided a foundation for our long-term health and wellness program that we will continue to build on as we work to foster a supportive culture for our teams. For more information about our efforts during the pandemic, see the Responding to the COVID-19 section on [page 11](#).

Employee Training

We actively invest in thorough safety training programs for our team members to contribute to a safe workplace, prevent injuries, and maintain compliance. Across our business units, we provide new hire training, job-specific task training, refresher training for tasks that pose additional risk, regulatory required training, and safety culture training. We currently offer more than 75 courses for team members through our corporate EHS library to develop and enhance their safety skills and awareness. In 2020, we emphasized remote learning to train our team members while maintaining their safety during the COVID-19 pandemic.

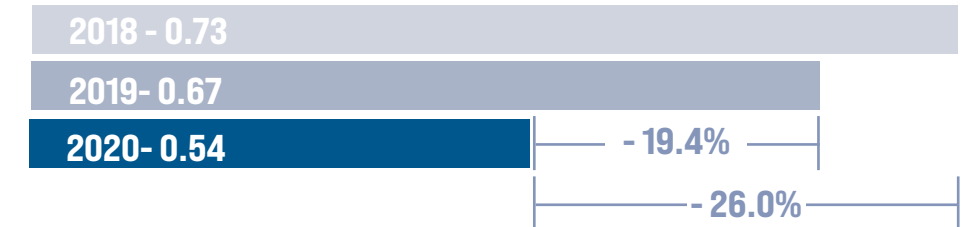
We also focus on ergonomics training for our team members. We continue to provide tools and training resources to assess ergonomic risks and implement improvements to our work designs. For example, we train manufacturing and industrial engineers to consider the safety of the operator when new manufacturing processes are introduced.

Performance

We are proud to have achieved a continued reduction in recordable incidents over the past three years. In 2020, our incident rate came in at 0.54 which is an improvement from the previous year of 0.67. We had zero fatalities in 2020 and our lost time case incident rate remains better than average for our industry, compared to data from the U.S. Bureau of Labor Statistics. Note that the reduction in hours worked related to COVID-19 shutdowns that were mandatory or advised.

Metrics

Incident Rate



In addition to our team members, our incident rate and lost time case rate include the available data for contractors working on the production floor. We plan to collect contractor data separately in the future, and we continue to improve processes to record company-wide data in a centralized system. For 2020, we have incorporated all sites for our Clean Air, Powertrain, Motorparts and Performance Solutions segments in the lost time case rate. The same scope of information is unavailable for prior years since we only reported a subset of data in previous reports.

See [Appendix A](#) for additional data.

Talent Attraction and Retention

Our global workforce is our most important asset because our people drive the success of our business and continuously serve our customers. To further enhance the capabilities of our team members, we foster a culture that emphasizes skill development and career advancement through coaching, training and performance reviews. We also strive to invest in the next generation of talent and promote greater awareness about the opportunity to influence innovation at Tenneco. We provide an opportunity for team members to actively contribute to the future of transportation and drive advancements in global mobility.

Management Approach

Engagement

We promote talent attraction and retention through a cross-functional approach that involves our Enterprise Talent Acquisition team, our Human Resources department and the leaders of Tenneco. In 2020, listening to feedback became increasingly important due to the pandemic, as we adapted quickly to support the health and well-being of our team members.



Our engagement survey revealed our strengths as our teamwork, processes for quality and emphasis on customers.

Our 2020 engagement survey solicited information about team member experiences, which helped us identify target areas for improvement to make Tenneco a great place to work. Since 2018, our engagement score across the enterprise has significantly increased. As we focus on future improvements, we will strive to celebrate the value of our team members, highlight the opportunities available and support their growth and advancement. For more information about the survey results related to living our values, see the Ethics and Compliance section on [page 24](#).

Talent Development

We invest in our team members' growth and future by offering a wide variety of training and development programs that improve their capabilities. We empower team members through our progressive "learn-do-lead" approach to develop our future leaders. More than 200 Tenneco team members serve as trainers, and we currently offer over 3,500 training sessions. These courses include information on technical skills as well as content to promote inclusion, diversity & equity, improve ergonomics and health, handle transitions at work and support well-being through work-life balance. Tenneco also offers courses for supervisor development on topics such as personal development, change, coaching and management.

Our Five Core Development Programs



The Crew - Business Line Leader Development Program

- Designed for business line leaders who are leading newly formed business lines
- Provides education, experience and exposure for leaders to become more efficient and effective, including business leaders
- Offers highly interactive workshops and covers people leadership and processes, with topics on change management, talent reviews and community services expectations



Rotational Program

- Identifies high-potential, early-career professionals to meet the future leadership needs of our business
- Participants complete a rigorous assessment process, receive focused skill development through classroom training and one-on-one mentorships and address business challenges across multiple locations and functions of our business



Management Development Center

- Participants complete predefined assessment tools, such as case studies, competency-based interviews, team collaboration exercises and individual exercises
- Provides detailed feedback and encourages attendees to establish a personal development plan



Value Stream Simplification Training

- Promotes awareness about how we simplify our operations to create superior financial returns
- Provides a deep understanding of what areas of the business drive the most value for our stakeholders, and conversely what areas drive complexity and distractions that create waste
- Develops strategies by identifying our priority markets and customers and creating intense focus on delivering superior product solutions to meet their needs
- Delivers sustainable, profitable growth by aligning our human and financial capital on these priorities while minimizing complexity and waste



Power Up

- Serves as a standardized program for European plants
- Aims to foster entrepreneurial attitude, increase agility, enhance ability to make strategic decisions and create awareness about changing market needs



Performance

Metrics

Average Annual Training Hours Per Salaried Team Member

Asia Pacific

2019 - 8 Hours

2020 - 14 Hours

Americas

2019 - 8 Hours

2020 - 13 Hours

EMEA

2019 - 5 Hours

2020 - 8 Hours

See [Appendix A](#) for additional data.

Talent Attraction and Retention (continued)

Talent Recruitment and Integration

In addition to our global recruitment process and career postings, we advertise positions to over 16,500 organizations that promote diversity in recruitment. After selecting qualified candidates, we have a robust orientation program to on-board our new hires and welcome them to Tenneco. Through this program, we train team members about the Tenneco Vision and Values, our Code of Conduct and company policies.

Succession Planning

We conduct annual talent reviews of our salaried workforce to assess development plans and identify high-potential talent for roles with greater responsibility. As part of these efforts, we establish succession plans for critical leadership roles at Tenneco, and we aim to increase retention by developing and promoting our team members. Our goal is to fill most of our jobs with internal candidates.

To maintain consistency when evaluating talent, we have established tools to determine potential based on modern behavioral science principles. We assess team member ability to learn and grow, their emotional intelligence and their motivation to contribute beyond their required responsibilities. Leaders assess frontline team members, and the reviews progress to higher levels, concluding with a presentation of results to the CEO and sharing with the Compensation Committee of the Board. By assessing the potential of team members and identifying talent gaps, we can understand opportunities for learning and development and update our strategy for talent acquisition and succession. We believe that how team members achieve results matters as much as what they achieve.

We believe that how team members achieve results matters as much as what they achieve.

Performance Reviews

To provide continuous guidance and support for growth, we have a target to complete performance reviews with 100% of team members. Through these performance assessments, we enable ongoing mentoring and identify opportunities for career development. These reviews also allow us to establish strategic performance objectives and continually refine our process to promote a high level of performance. Although we do not currently track performance reviews with our hourly team members in a central database, we are working to implement a plan that will record assessments and support our goal.

The Road to Making Tomorrow Better: Training Our Leaders



Our most recent initiative, **The OnRamp**, is a leadership program designed to train rising leaders and improve collaboration across the company. To foster positive, lasting relationships, we execute this course over eight weeks for a set number of hours per week. Leaders from different functions within Tenneco teach the course, so participants can learn directly from leaders. This training is highly interactive to promote engaging opportunities for learning. Ethical decision-making and leadership in values and compliance are also core. In 2020, we piloted the program with 47 team members virtually participating in the program and 15 leaders directing the courses. We have started rolling out the program virtually in 2021 and have nearly 150 people enrolled in the program.

Compensation and Benefits

In addition to fair compensation, we offer both defined benefit and defined contribution retirement plans to which Tenneco contributes on behalf of the plan participants. The company also provides severance benefits for U.S. team members and other transition assistance programs as required for other countries. As part of our Annual Incentive Plan, eligible team members are entitled to an annual cash incentive based on the overall performance of the company. Team members may earn their incentives based on corporate performance or the performance of their business unit. Our approach to compensation supports our efforts for talent attraction and retention.



Inclusion, Diversity and Equity

As a global company, we recognize the diversity of the communities where we operate and the need to foster inclusivity. Our geographical markets have unique requirements, and we continue to leverage the experiences and insights of our team members to meet these needs and differentiate Tenneco as an industry leader. Although we are at the beginning of our journey to formalize our strategic approach to inclusion, diversity and equity, we continue to leverage opportunities to enhance the diversity of our workforce.

Management Approach

Policies

Our Valuing Global Diversity Policy demonstrates our commitment to promote a welcoming environment and celebrate the diverse backgrounds of our team members. We have also implemented an Equal Employment Opportunity Policy and Harassment Free Workplace Policy to protect the rights of all team members. Through our talent recruitment process, we advertise positions through multiple channels including over 16,500 organizations that promote diversity in recruitment, to access a wide group of qualified applicants who can support our growth and contribute to our success. Our efforts have also enabled us to increase the number of women in our business.

Leadership

In 2020, we launched our IDEA (Inclusion - Diversity - Equity - Action) Board. The IDEA Board consists of a team of hand-picked leaders that reflect the geographic, business, gender, ethnic and racial diversity of Tenneco. This team leads the development, implementation, management, and data-driven goal setting for our inclusion, diversity and equity strategy. We also plan to launch business resource groups to empower our team members and integrate inclusion, diversity and equity into the very fabric of our culture.

To further integrate inclusion, diversity and equity, we recently welcomed our new Vice President of Culture, Inclusion, and Engagement. This role reports to the Chief Human Resources Officer and will lead our efforts to attract and develop diverse talent, improve engagement, and support all team members throughout their careers. Additionally, the Vice President of Culture, Inclusion, and Engagement will work with the IDEA Board to sponsor programs designed to embed inclusivity into our global operations.

As part of our efforts, our Vice President, Human Resources Operations serves on the Center for Automotive Diversity, Inclusion and Advancement (CADIA) Advisory Board to illustrate our dedication to strengthening diversity in the automotive industry. Tenneco was a sponsor of CADIA's virtual 2020 Rev Up Now event focused on doubling the number of diverse leaders in the automotive industry by 2030. CADIA hosts this annual initiative that features original equipment manufacturers (OEMs) speakers, interactive sessions and engaging dialogue about accelerating inclusion, diversity and equity in the industry.



In 2020, we celebrated International Women's Day (IWD) across our global locations by thanking our female team members for their contributions and focusing on the international #EachforEqual theme. This program encourages us to challenge bias, broaden our views and improve situations for women. At our Los Reyes plant in Mexico, team members attended a training session on domestic violence. Our Napoleon, Ohio plant team members received gifts that commemorated "Rosie the Riveter," an icon for breaking down barriers.


In 2021, we built upon our successful inaugural celebration of IWD in 2020 by celebrating the global diversity of women leaders at Tenneco. We adopted a "follow the sun" approach by kicking off our celebration in APAC, moving west to EMEA and then ending the day in the Americas. We hosted virtual panel discussions that featured female leaders, including a Tenneco Board member, and were joined by our Chief Operating Officer. We also encouraged people to invite their daughters. To demonstrate support of IWD, thousands of employees across the globe purchased purple shirts or scarves or wore purple.

The Road to Making Tomorrow Better: Including People with Disabilities



Our San Martin Obispo Distribution Center in Mexico facilitated an Inclusion Program to provide employment opportunities for people with intellectual disabilities. In Mexico, 2.8 million people have intellectual disabilities, but only 10% have access to work and only 1% receive payment for their work. The facility collaborated with two nonprofit foundations, Include-Me and FADEM, to receive training on inclusive recruitment and job environments. During the first year of the program, they hired three people with intellectual disabilities who have successfully contributed to the team. Although the pandemic prevented them from working on-site during part of 2020, the facility has continued to support them and is looking forward to safely welcoming them back soon.

We have committed to improve both gender and U.S. minority group representation to reach a goal of one third by 2030. We will do that by actively managing recruitment, turnover and talent movement within the pipeline.

Material Topic	Goal
 Inclusion, Diversity and Equity	<ul style="list-style-type: none"> Increase gender diversity to One Third females globally at manager level and above by 2030.
	<ul style="list-style-type: none"> Increase U.S. minority group representation to One Third at manager level and above by 2030.

The Road to Making Tomorrow Better: Increasing Female Representation

At our plant in Chakan, India, local managers recognized the lack of women in the automotive industry and explored opportunities to improve gender diversity. The facility focused on diverse recruiting to hire women at all levels and implemented programs to encourage female applicants. Initiatives also included a committee to prevent sexual harassment, additional female washrooms, and other support to improve female talent retention and safety. The percentage of salaried women in Chakan increased from 7.61% in 2018 to 12.38% in 2020. Additionally, two female team members have been promoted to production team leaders reflecting their continued efforts to build a diverse leadership pipeline.

Performance

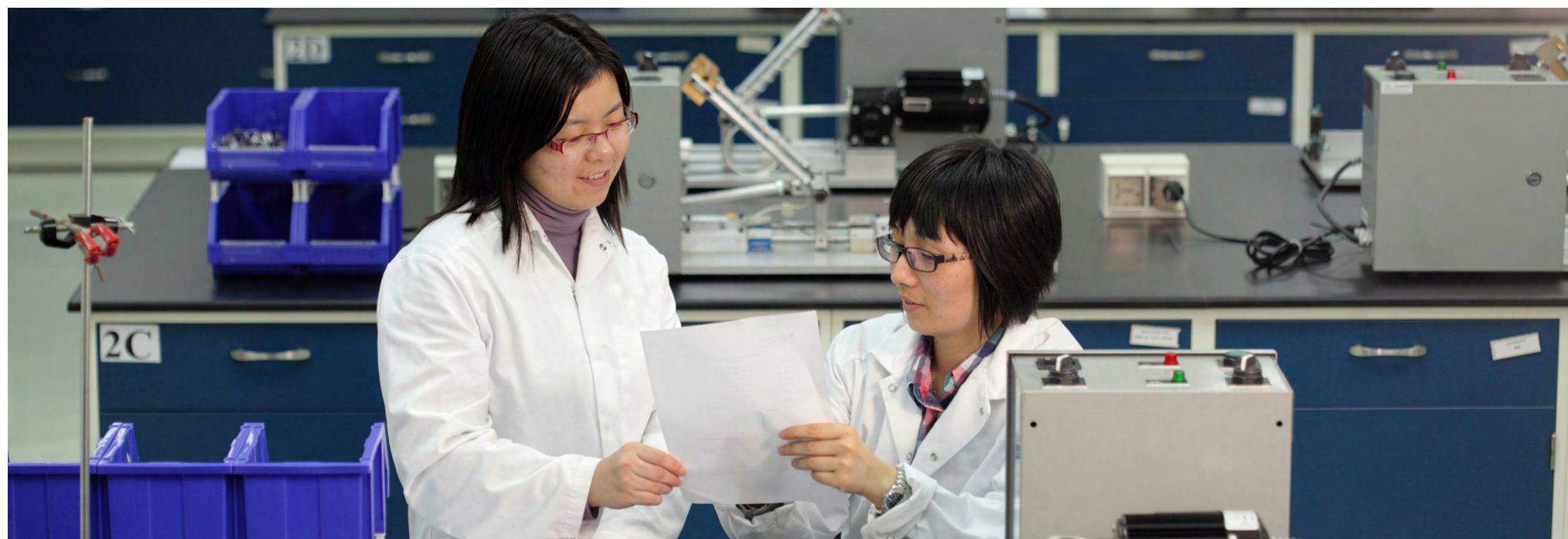
Metrics

Diversity of Governance and Employees ¹		Senior Management	Supervisors/Managers	Professionals
Gender	Female	17%	19%	26%
	Male	83%	81%	74%
Age	<30 Years	0%	2%	15%
	30-50 Years	55%	68%	70%
	>50 Years	45%	30%	15%
Other indicators of diversity	U.S. Ethnic Diversity ²	16%	18%	16%

¹Data as of 12/31/2020

²Native Hawaiian or Other Pacific Islander/Asian/Hispanic or Latino/American Indian or Alaska Native/Black or African American/two or more races.

Labor Relations



As a global business, we commit to fair labor practices and respect human rights in our operations. Our [Code of Conduct](#) sets the standards for our behavior and highlights our commitment to preserving fair working conditions. Our responsibility extends to our suppliers and partners because we expect human rights to be upheld across our whole value chain. As part of our commitment, we foster collaborative relationships with our unionized workforces, promote open communication and respect their rights. We strive to mitigate risks of work disruptions by continuously working to maintain fair labor standards and proactively engaging in discussions with our team members. Positive labor relations can also benefit our business and improve workforce satisfaction and productivity.

Management Approach

Standards

Globally, an estimated 53% of our team members are covered by collective bargaining agreements. We work hard to collaborate and to maintain positive relationships with these team members. In the U.S., our sites are subject to compliance under the National Labor Relations Act (NLRA), which gives team members the right to consider a third party to represent them in collective bargaining. We post information at all U.S. sites to remind team members of their rights under the NLRA. We had no NLRA violations in our facilities in 2020.

Our [Basic Working Conditions Policy](#) outlines our commitment to uphold the rights of workers and respect their freedom of association. We recognize the right to associate with a legally sanctioned organization and do not discriminate against team members based on their associations.

As our policy states, we also prohibit child labor or forced labor, and we pledge to maintain fair, safe working conditions. We apply a unified approach to interactions with team members in all locations where we operate. Our principles are compatible with the following frameworks:

- The United Nations Universal Declaration of Human Rights
- The United Nations Global Compact
- The Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises
- The Global Sullivan Principles of Social Responsibility

Communication Mechanisms

We promote multiple opportunities to receive input from our team members and listen to their feedback. Each plant manager holds regular meetings to provide updates and discuss issues through proactive communication. We also maintain an open door policy to allow any team members to bring up concerns or questions immediately to supervisors. At the start of each shift, plants hold line meetings with team members to review approaches to safety, quality, scrap, efficiency and other relevant topics. Team members may also report any ethical issues through the Tenneco hotline, which is operated by a third party and available 24/7 in multiple languages.

In 2020, COVID-19 significantly affected our operations and changed our safety protocols. Local unions partnered with the management teams to immediately implement these procedures and adhere to safety standards. For more information about our efforts during the pandemic, see the Responding to the COVID-19 section on [page 11](#).

Performance

Metrics

U.S. Equal Employment Opportunity Commission charges and National Labor Relations Act violations	2019	2020
Number of EEOC charges filed ¹	8	16
Number of NLRA violations	0	0

¹To date, no charge has resulted in a finding in favor of the charging party.

Percentage of total employees covered by collective bargaining agreements ²	2019	2020
Percentage of total employees covered by collective bargaining agreements in the U.S.	17.1%	19.6%
Percentage of total employees covered by collective bargaining agreements globally	50%	53%

²The increase is mainly driven by headcount reduction and restructuring in 2020 related to the impact of COVID-19 on the business.

Minimum notice periods regarding operational changes ³	2019	2020
Minimum number of weeks' notice typically provided to U.S. employees and their representatives prior to the implementation of significant operational changes that could substantially affect them	8.5	8.5
For organizations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements	Varies regionally	Varies regionally

³Notice periods vary regionally. Tenneco follows all local regulations for minimum notice periods. For example, the minimum notice period for plant closure or significant reduction is 60 days of notice per the Worker Adjustment and Retraining Notification Act (WARN) Act in the U.S.

Community Involvement

To live our Tenneco values, we support our local communities by donating, volunteering, and participating in events that promote engagement. We also invest in economic development by hiring locally and providing jobs for the surrounding areas.

Management Approach

Community Investment

At multiple sites, we regularly engage in activities with several organizations that enhance education and opportunities for children, such as Starfish Family Services, Winning Futures, and United Way. As part of our endeavor to unite our operations and combine legacy efforts, we relaunched our TEN10 Recognition Program across the organization in 2021. This initiative encourages greater engagement and includes a peer nomination process for team members who embody the Tenneco values. In addition to providing a monetary award and recognition ceremony for winners, we donate \$10,000 on behalf of each global winner to their selected charity.

We also strive to contribute to economic development of our communities by supporting employment opportunities, providing scholarships, and making investments in local economies. Our business continues to create more than 70,000 jobs around the world. As part of the annual [Garage Gurus Scholarship Program](#), we award scholarships up to \$2,500 to 12 students to support their education expenses and engage the next generation of automotive technicians. Garage Gurus provides technical training and expertise to address the technician shortage and the skills gap in the industry.



We relaunched our TEN10 Recognition Program across the organization in 2021. This initiative encourages greater engagement and includes a peer nomination process for team members who embody the Tenneco values.



COVID-19 intensified our mission to stimulate our local communities, as people around the world felt the impacts of the pandemic. To support our communities as they faced these challenges during 2020, we provided masks and PPE to local hospitals and health organizations, and donated food items to local charities and food pantries. Additionally, we provided support and other resources to the elderly and to first responders in our communities. We also supplied components for a customer to produce ventilators for COVID-19 patients. For more information about our actions during the pandemic, see the Responding to COVID-19 section on [page 11](#).



The Road to Making Tomorrow Better: Supporting United Way of Southeastern Michigan

As the COVID-19 pandemic increased the requests for support in 2020, we took immediate action to address the needs of our communities. One example was our 2020 virtual campaign for United Way of Southeastern Michigan. United Way operates a helpline to help families meet their basic needs including food, housing, and healthcare. We raised over \$157,000 from Michigan team members and the company's matching donation. Our Executive Director of Corporate Communications serves as a member of the United Way for Southeastern Michigan Campaign Cabinet.

Our Governance



Our foundation of strong governance and ethics represents our commitment to accountability, integrity, and compliance in our operations.

Our Board of Directors is responsible for overseeing management and ensuring that we serve the long-term interests of our stockholders. We recognize that sound principles of corporate governance are essential in obtaining and retaining trust and respect of internal and external stakeholders. We monitor and improve responsibility along our supply chain to maintain respect for human rights and mitigate environmental impacts from our suppliers. We also protect our systems with enhancements in security to preserve data privacy for our team members and our customers. As we continue to strengthen governance, we collaborate as One Team to achieve alignment across the whole enterprise and incorporate our values throughout our operations.

Skip to:

[Corporate Governance](#)

[Ethics and Compliance](#)

[Cybersecurity and Data Privacy](#)

[Responsible Sourcing](#)

[Supplier Diversity](#)

[Conflict Minerals](#)

[Supply Chain Management](#)

Suggested Links:

[Corporate Governance Plan](#)

[Code of Conduct](#)

[Ethics & Compliance Hotline](#)

[Basic Working Conditions Policy](#)

[Conflict Minerals Statement](#)

Corporate Governance

Our approach to corporate governance connects to our mission, values, and culture. We integrate responsibility and accountability into our governance structures to maintain oversight of our material topics and incorporate stakeholder interests into our strategy development. Through our comprehensive and effective management of corporate governance, we outline roles and expectations, set high standards of professional and personal conduct, and monitor compliance with these responsibilities.

Management Approach

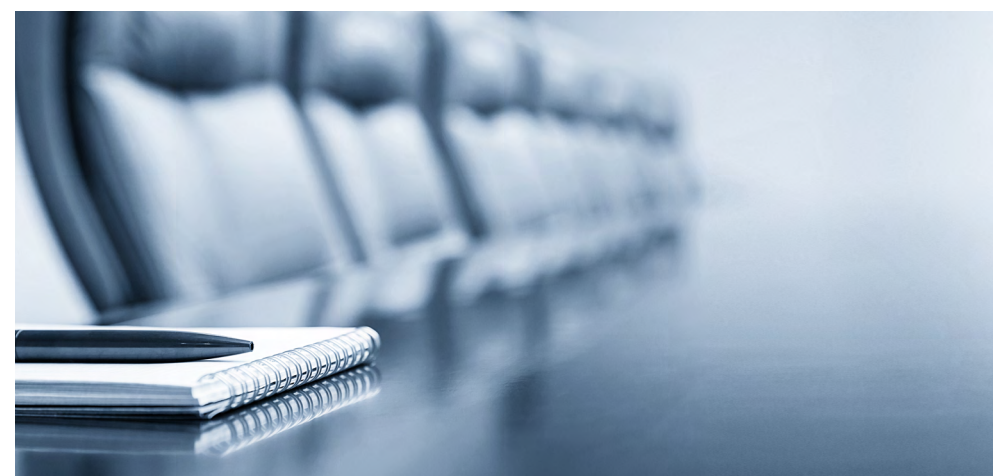
Board of Directors

As of July 1, 2021, the Tenneco Board of Directors is comprised of 10 members. Our experienced Board of Directors are well-positioned to provide appropriate oversight with respect to Tenneco's policies, direction, strategy, and performance. The names and business experience of each director can be found on our website and in our most recent proxy statement filing with the SEC. Tenneco's Board of Directors has three standing committees: Audit, Compensation, and Nominating and Governance. Each committee has a written charter which can also be found on [our website](#).

We believe that a diverse Board composition provides significant benefit to the company. The Nominating and Governance Committee considers numerous factors when identifying and recommending nominees to the Board of Directors including candidate's professional experience, background, perspectives, demographics, gender, race, nationality, and age. In 2020, the Board of Directors revised its Corporate Governance Principles to add a provision ensuring that the Nominating and Governance Committee will direct search firms to include qualified female and minority candidates on its list of potential director candidates.

Outreach and Engagement

As part of our overall corporate governance, we have an ongoing outreach program to develop and maintain communication with our investors about governance and compensation issues. In 2020, members of senior management and our Chairperson of the Board expanded our governance outreach to solicit stockholder perspectives and receive valuable, direct feedback on governance, executive compensation, sustainability, and related matters. This outreach was in addition to management's regular participation in investor, community, industry and analyst conferences, and meetings throughout the year that cover performance and ESG topics. Stockholders may also contact the Board with any inquiry or issue by the methods described in our proxy statement.



Board of Directors	As of December 31, 2020 ¹
Size of Board	10
Independent Directors	9
Independent Chairperson	Yes
Separate Chairperson and CEO	Yes
Committees consist of entirely independent members	Yes
Non-Management executive sessions regularly conducted	Yes
Mandatory retirement age	75
Annual election of Directors	Yes
Majority voting in uncontested Director elections	Yes
Diverse Board members (race and gender)	30%
Comprehensive annual assessments of the Board and committees	Yes

Diversity of Board Directors		2020 ¹
Gender	Female	30%
	Male	70%
Age	<30 Years	0%
	30-50 Years	0%
	>50 Years	100%
Other indicators of diversity	Ethnic Diversity in the U.S.	10%

¹Data reflects status as of December 31, 2020.

Risk Management

Our Board recognizes that risk management is primarily the responsibility of the company's management team, however, the Board plays a critical role in risk oversight, including the identification and management of risk. Throughout the year, senior leaders of our business units and functional groups present to the Board regarding specific risks that the company faces. Management annually provides a comprehensive strategic review to the Board that includes discussion of the major risks and strategies to manage these risks – including economic, environmental, and social topics.

At each regularly scheduled Audit Committee meeting, the company's General Counsel provides a report to the Audit Committee regarding any significant litigation, environmental, and regulatory risks faced by our company. The Audit Committee oversees the company's compliance programs, including compliance with the company's Code of Conduct. The Compensation Committee reviews our compensation structures and programs to ensure that they do not encourage excessive risk-taking.

ESG Oversight

The Board oversees our corporate responsibility and sustainability practices, because we are committed to helping our customers, team members and communities build a sustainable future. While ultimate oversight for ESG topics falls under the purview of the entire Board, each Board committee has various responsibilities connected to sustainability matters.

We provide public reporting and are forthcoming in disclosures about our environmental stewardship and long-term strategy, including voluntarily reporting our climate risk strategy and related data to CDP. Further, the Nominating and Governance Committee has an active role in the review and approval of our annual Sustainability Report.

Our executive management holds ultimate responsibility for ESG and oversees the review, evaluation and updates to our sustainability goals and key performance indicators within our business units. Our cross-functional ESG Council advises management periodically on progress and determines how to drive long-term shareholder value. The ESG Council comprises functional leaders of EHS, Legal, Human Resources and Talent Management, Finance, Engineering, Supply Chain and Logistics.

Our Chief Ethics and Compliance Officer was also recently appointed to the role of Senior Vice President and Chief ESG Officer. Reporting to the CEO, the Senior Vice President and Chief ESG Officer drives a cross-functional ESG program and collaborates with our other executive leaders to implement our sustainability strategy. This role enables a holistic approach to ESG, compliance and risk management and promotes alignment across Tenneco.

Ethics and Compliance

We commit to high ethical standards at Tenneco because we value the trust of our stakeholders and recognize that our success depends on our culture of Integrity Always. To enable our ability to lead responsibly, we instill a foundation of ethics and train our team members to actively live and promote our values. We also mitigate financial, reputational and legal risks by maintaining compliance with international laws and local regulations throughout our global locations. As the regulatory landscape evolves, we will continue to implement mechanisms for accountability and navigate new requirements to maintain compliance.

Management

Code of Conduct

The [Tenneco Code of Conduct](#) guides our behavior as we evaluate decisions and operate with Integrity Always. We updated our Code in 2021 to integrate our new corporate values and improve the Code's functionality. Available in 22 languages to promote accessibility, our updated Code reflects our commitment to unite our business units and instill an ethical culture across our operations as we move forward together and live our values.

To unify our operational approach to all policies, we implemented a new Tenneco Policy System in 2020 to ensure consistency in our global policies across our business units and locations. We continue to evaluate our standards and implement processes to maintain compliance and refine our policies, and we perform a periodic Legal and Compliance Program Assessment to improve the effectiveness of our management.

Employee Training

All salaried team members annually review and certify compliance with our Code of Conduct. In 2020, we also expanded The On Ramp program to enhance training for new managers and strengthen leadership skills to promote our values; we will continue to launch this program across the business in 2021. For more information, see the Talent Attraction and Retention section on [page 17](#).

To supplement the Code certification, we provide online compliance training for team members to learn about a variety of risks and topics, such as ethical decision making, respect in the workplace, privacy, information security and antitrust measures. We also focus on anti-corruption training and initiate periodic quizzes to test team member knowledge about fighting corruption.

We offer on-demand resources on our corporate intranet and live training that builds on our collective knowledge of ethics and compliance. We customize the training based on particular audiences and trends that we have observed from our hotline, internal feedback, law changes and control improvements. Although we could not offer the training in person in 2020 due to the pandemic, we were able to engage in 190 interactive training sessions for ethics and compliance and reached approximately 8,600 team members.

Employee Engagement

We strive to continuously enhance communications with team members and improve their understanding of our values and ethical behaviors. In 2020, our employee engagement survey reflected significant improvements in scores relating to our culture. Engagement results related to living the values were generally above or at the benchmark. Team members reported that they feel more comfortable reporting any suspected violations and agreed that Tenneco shows dedication to ethical conduct.

In 2020, we held a virtual contest on our intranet and asked team members to submit "memes" related to compliance. We achieved over 15,000 views in 30 days, and we continue to provide opportunities for team members to express their commitment to compliance. We are continuing to look for additional ways to showcase employee talent and achievements in this area.



In 2021, Tenneco was awarded Compliance Program of the Year award by Compliance Week for its work in 2020. Due to the global pandemic, many companies paused or decelerated their compliance programs; Tenneco, on the other hand, increased its efforts. Driven by the company's Core Values, Tenneco utilized an approach called Tenneco GPS, which directs our choices to ensure we find the right way to do things. Included within this approach was establishing a global culture encouraging team members to speak-up about their experiences, to share ideas, and to let us know if things were not working. Our culture is built on employee feedback, and having these methods of communication available is key. To drive this point home, we engaged team members in a Meme Contest, asking them to create memes about our core value of "Integrity Always" and what it meant to them. It was a fun way to lift spirits while driving home our goals.

For the full Compliance Week article about this award [click here](#).

Potential Misconduct

We provide multiple resources for team members to report any suspected violations of the Tenneco values or Code of Conduct. Team members can discuss any concerns with their managers or Human Resources representatives, and they can use the [Tenneco hotline](#), which is available 24/7 in multiple languages through a toll-free phone number and the Tenneco website. This hotline allows anonymous reporting, where permitted by law, and is operated by an independent third party to encourage team members to freely convey any issues. We receive hundreds of reports annually, which is to be expected for a company of our size. We value it when team members help us to improve. The majority of calls pertain to Human Resources questions, and all reports are investigated in accordance with our policies. To encourage our team members to speak up, we maintain a Non-Retaliation Policy to protect anyone who raises a concern, reports misconduct or participates in an investigation. If team members are suspected of retaliation, we enforce strict discipline measures, up to and including termination.





Anti-Corruption

We actively fight corruption in our industry and prohibit bribes and the facilitation of payments with any relation to Tenneco. We recognize the higher risk of corruption in certain areas where we operate, and we acknowledge the harmful impacts that corruption can have on local communities. To combat these risks, we evaluate vendors for compliance with our Code of Conduct and use risk-based, third-party due diligence screening for vendors.

Our Internal Audit department also performs an annual enterprise risk assessment that includes evaluating corruption risk. In addition to training our team members on anti-corruption, we annually celebrate our positive performance on International Anti-corruption Day and highlight our best-in-class practices. In 2020, we included trivia questions so team members could demonstrate their awareness and strengthen their ability to properly respond to any instances of corruption.

On a quarterly basis, all plant controllers, plant managers, individuals throughout the finance reporting chain and key members of senior management are required to sign certifications in support of our quarterly financial reporting process. These certifications cover a variety of topics including knowledge of any fraud or alleged fraud, absence of undue influence by management on financial reporting, and compliance with the Foreign Corrupt Practices Act (FCPA) and other applicable anti-bribery laws.

Performance

As publicly disclosed in the 2020 10K, we have been subject to antitrust investigation and litigation since 2014. With the administrative closure of the European Commission’s antitrust inquiry on April 27, 2017, settlements on civil putative claims in the United States and Canada, and the granting of unconditional leniency from the Department of Justice in October 2020, we do not expect to incur any additional material costs for investigations by competition agencies or civil lawsuits related to possible violations of antitrust laws relating to products supplied by us and our subsidiaries, including Federal-Mogul. The two additional actions in 2020 are related to the class resolution process and do not reflect new claims or additional antitrust concerns.

To mitigate the risks of noncompliance, we took steps to prevent similar issues in the future. For example, we provided additional compliance manuals and training to our commercial teams. We also enhanced antitrust training for various business units and teams around the world. We continue to raise awareness and emphasize the importance of antitrust compliance at Tenneco.

Metrics

Operations Assessed for Risks Related to Corruption	2020
Total number and percentage of operations assessed for risks related to corruption	100% of our operations are assessed and evaluated for multiple compliance and ethics risks, including risks related to corruption.
Significant risks related to corruption identified through the risk assessment	We consider operations that require contact with government officials to pose the most significant risk of corruption through bribery (obtaining government permits, cross-border logistics, sales to government entities, etc.).

Anti-competitive behavior, antitrust, and monopoly practices	2019	2020
Number of legal actions pending during the reporting period regarding anti-competitive behavior and violations of antitrust and monopoly legislation in which the organization has been identified as a participant	7	9 ¹

Losses due to anti-competitive legal proceedings	2019	2020
Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	\$0.6M	\$33M ²

¹ See performance paragraph for explanation.

² These costs relate to prior events and do not represent new cases. Tenneco established a reserve of \$132 million in our second quarter 2017 financial results for settlement costs relating to these matters; less than \$1 million remains at December 31, 2020. See 2020 10k for further detail.

Cybersecurity and Data Privacy

The Board oversees the company’s information technology risk and associated information risk management program. The Audit Committee receives information technology and cybersecurity updates that focus on program governance, control maturity, and third-party information security assurance at least twice per year, with the Board receiving a similar briefing once per year.

Tenneco has a standing Information, Security, and Privacy Executive Steering Committee that meets regularly during the year. This steering committee is responsible for approving the organization’s information security charter and authority to operate, as well as demonstrating the importance of information security and privacy risk management as critical business issues. Additionally, this committee serves as the standing Cyber-Resilience Committee in the event of a cyber-crisis affecting the organization that requires cross-functional management response.

Management Approach

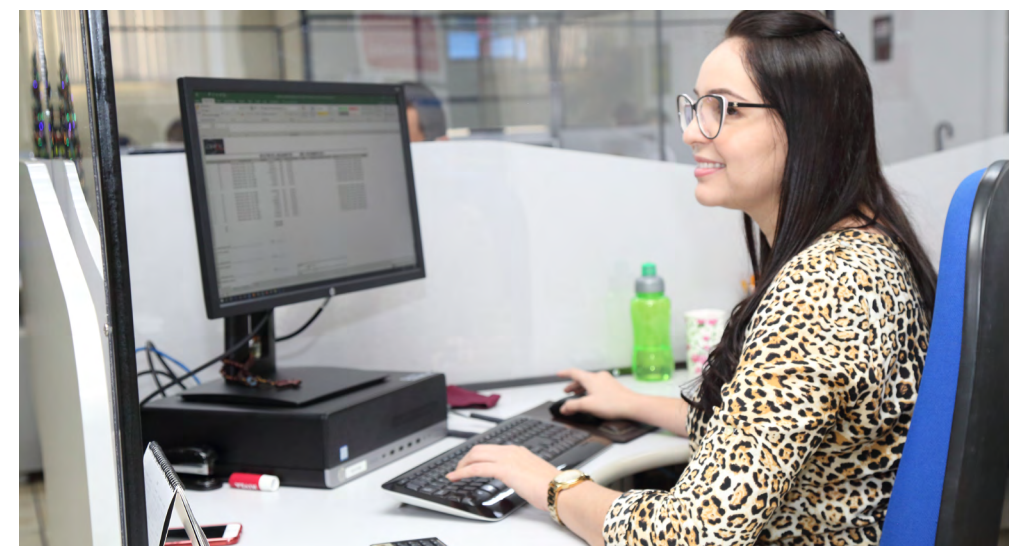
In 2020, we made significant progress in transitioning to an enterprise-wide governance approach for cybersecurity that will continue in 2021. To promote effective oversight, we centralized cybersecurity and data privacy for Tenneco in 2020. Our Chief Information Security Officer oversees the program. In 2020, we also organized an information technology policy governance committee tasked with reviewing and approving cybersecurity and data privacy policies. We continue to invest in the modernization of our overall information systems.

Industry Frameworks

Our information security programs are developed based on industry-leading frameworks, including the National Institute of Standards and Technology (NIST) and ISO 27001 standards. In alignment with the NIST and ISO frameworks, our cybersecurity and data privacy program enables the creation of governance and policy artifacts mapped to each control framework. Our risk-based information technology systems allow us to prioritize deployment of controls and routinely gauge effectiveness of the program controls against our maturity objectives. Additionally, senior management reviews the assessments and outside partners validate the design and implementation of cybersecurity and privacy controls across the enterprise.

Training

We conduct multiple levels of testing and invest in team member training to improve the resilience of our information systems and promote greater awareness of cybersecurity risks. Regular updates on cybersecurity and data privacy risks are shared with various stakeholders across Tenneco. We conduct phishing testing and enterprise tabletop testing for our cyber-crisis management and cyber-resilience capabilities annually. Tenneco provides training and awareness of information technology governance through policies and procedures, reviews information risk topics, and takes advantage of current events to educate employees and contractors interacting with Tenneco’s information system.



Data Privacy

We aim to build trust with our stakeholders and protect their interests throughout our operations by designing privacy into our personal data-processing activities. Our privacy statement outlines our commitment to protecting personal information and describes the rights that individuals have, and how they can exercise those rights. In alignment with our policies and our commitment to stakeholder trust, we investigate incidents and customer privacy complaints thoroughly in accordance with legislation, such as the General Data Protection Regulation (GDPR).

Because we do not have a strong business-to-consumer element, we do not obtain, process or store a significant amount of consumer information. We do manage human resources data for our own team members, and we rely on third parties to process payroll on behalf of the company’s team members.

We maintain systems, applications and data types that are critical to business, and we recognize that loss of confidentiality, integrity or availability poses a risk of liability to third parties and harm to the company brand, reputation, operations or assets. We also value management of cyber-physical risks, both internally with connected shop floor operational technology as well as product development and product security. We began investing in shop floor segmentation in 2021 and beyond. Additionally, product development and product security will receive additional focus in 2021 and beyond as the automotive sector continues to migrate from internal combustion to autonomy and electrification.

Performance

We measure our control maturity and comprehensiveness through a strategic business partner to annually evaluate our cybersecurity program. Additionally, key performance indicators are collected and monitored to demonstrate cybersecurity and data privacy performance over time. These include the number of events per month, number of investigations, number and type of cybersecurity incidents, and any associated exposure.

Metrics

Substantiated complaints concerning breaches of customer privacy and losses of customer data	2019	2020
Total number of substantiated complaints received concerning breaches of customer privacy, categorized by:		
Complaints received from outside parties and substantiated by the organization	0	0
Complaints from regulatory bodies	0	0
Total number of complaints	0	0
Total number of identified leaks, thefts or losses of customer data	0	0

Responsible Sourcing

To meet the stakeholder expectations and maintain business continuity, we mitigate environmental and social risks in our supply chain and enforce our procurement standards. As part of our commitment to human rights, we perform due diligence and evaluate our suppliers regularly. We comply with requirements related to conflict minerals. We also continue to enhance visibility along our supply chain, identify opportunities to improve our procurement efforts, and mitigate risks of disruption.

Management Approach

We commit to the protection of human rights and responsible sourcing throughout our supply chain as outlined in our [Code of Conduct](#), [Basic Working Conditions Policy](#) and [Supplier Manual](#)¹. As a condition of doing business with Tenneco, we require suppliers to agree to follow the Tenneco Code of Conduct and Supplier Basic Working Conditions Policy. We complete restrictive and financial supplier screening to ensure we choose suppliers that maintain acceptable financial standing and comply with trade regulations. We also use risk-based, third-party due diligence screening.

Mitigation actions include background checks, contract clauses, training, and monitoring. In 2020, we strengthened our supplier screening processes to further account for compliance with our Code of Conduct and Basic Working Conditions Policy during the onboarding process. In addition, we include human rights clauses or perform supplementary screenings before completing significant investment agreements and contracts. We also expect our suppliers to conduct internal audits and self-assessments as a condition of our contracts.

Performance

Metrics

In 2020, our direct supplier on-boarding process required that we screen 100% of our new suppliers using Tenneco's supplier requirements including social and environmental criteria.

¹Supplier manual covers Performance Solutions and Clean Air requirements only. A new global supplier manual is under development to be released in 2021.



Supplier Diversity

Diversity improves the strength of our supply chain and the continuity of our operations. Therefore, we actively pursue partnerships to maintain a diverse supplier base and continue to promote equal access to procurement opportunities for diverse businesses. We accept supplier certification from the National Minority Supplier Development Council, the Women’s Business Enterprise National Council, the National Veterans Business Development Council, the Center for Verification and Evaluation and other LGBTQ, HUBZone, and Disabled-owned businesses. We have developed internal goals to meet levels of supplier diversity beyond customer targets, and we continue to pursue engagement with diverse suppliers.

Management Approach

We also aim to leverage the capabilities of our existing diverse suppliers and grow our partnerships by connecting them to more opportunities for business in different divisions throughout Tenneco. For example, one of our diverse suppliers provided only forklift leasing for us in the past and we worked with them to expand their leasing types to include multi-functional printers across all four business segments. To help more suppliers gain certification and become eligible to work with us, we offer panel discussions to understand the steps to secure business with Tenneco. We educate suppliers and partner with certifying councils to recruit and develop members.



In 2020, we leveraged our partnerships and memberships to connect to diverse suppliers that were interested in doing business with Tenneco. Our engagement activities included the following:

- Asian Pacific American Chamber of Commerce events
- Michigan Minority Supplier Development Council mentor/mentee Infuse program, which aimed to promote the progression and development of a supplier diversity professional, improve overall performance of our program, share best practices and collaborate on innovative ideas to support the success of minority businesses
- Active members of the Great Lakes Women’s Business Council, including reinventing their Mission and Vision and annual “Meet the Buyer” events sponsored by the National Minority Supplier Development Council
- Michigan Minority Supplier Development Council Signature Event Committee and the Amazon Minority Business and Technology Initiative, a collaboration between Amazon Business and the U.S. Department of Commerce and Minority Business Development Agency (MBDA)
- Michigan Hispanic Development Council Member networking events
- Women’s Business Enterprise National Council and Blue Cross Blue Shield of Michigan’s Pitch and Pivot series
- 2020 sponsor of the 20th Annual Great Lakes Women’s Business Council Virtual Conference
- Connections to veteran-owned and service-disabled veteran-owned businesses through the National Veteran Business Development Council (NBVDC); our Senior Purchasing Manager was also appointed to the NBVDC Advisory Board

The Road to Making Tomorrow Better: Showcasing Diverse Suppliers

To improve our performance and promote supplier diversity, we created the Diverse Supplier Spotlight to connect key decision-makers at Tenneco with qualified diverse suppliers. This program has provided more opportunities to diverse suppliers to bring value to the supply chain. For example, one business unit hired over 25% of the diverse suppliers presented to them. We met with leaders throughout the organization to promote awareness of the value of supplier diversity and continue to introduce qualified diverse suppliers to our supply chain. We also maintain processes to track our supplier diversity performance and target areas of improvement. As we evaluate our ability to reach diverse suppliers, we will continue to improve our engagement to enhance supplier diversity in the future.

Performance

The COVID-19 pandemic had a hard impact on our diverse suppliers. In 2020, overall spending decreased because certain diverse suppliers went out of business. Additionally, some suppliers did not renew their diversity certifications, diverse businesses were sold to non-diverse businesses, other suppliers lost Customs Trade Partnership Against Terrorism (CTPAT) certification, and some suppliers had a reduction or resourcing of business.

Metrics

Diverse Suppliers ¹		2018	2019	2020
Minority Business Enterprise (MBE)	Number of Suppliers	95	63	75
	Spend (millions)	75	64	51
Woman Business Enterprise (WBE)	Number of Suppliers	111	84	88
	Spend (millions)	55	49	25
Veteran Business Enterprise (VET)	Number of Suppliers	27	31	14
	Spend (millions)	92	69	2

¹This includes combined data for our Powertrain, Clean Air, Motorparts and Performance Solutions business units.


Conflict Minerals



In accordance with our [Conflict Minerals Statement](#), we are committed to responsible sourcing by procuring components and materials from companies that share our values around human rights, ethics, and environmental responsibility.

Management Approach

We comply with the Dodd-Frank Wall Street Reform and Consumer Protection Act, supporting elimination of the use of tantalum, tin, tungsten and gold (3TG) from improper sources that could promote abuses in the Democratic Republic of the Congo Region (DRC) or one of the DRC nine adjoining countries. As part of our approach, we recently adopted the following goal:

Material Topic	Goal
 Conflict Minerals	Develop a strategy by 2024 to phase out, where possible, 3TG smelters and refiners nonconformant with RMI in the supply chain.

To enforce our requirements, we have an annual, comprehensive due diligence process for our supply chain to document the origins of minerals and review responses to our supplier questionnaires. Our suppliers must also request information about the use of conflict minerals from their direct suppliers, who must solicit information from the next tier of suppliers. We expect all suppliers to exercise this level of due diligence and report the chain of custody on these minerals to Tenneco. Our Conflict Minerals Oversight Committee reviews our process for due diligence to monitor compliance with regulations.

Our relevant suppliers, who are classified as strategic and critical suppliers as defined by the Organisation for Economic Co-operation and Development (OECD), are given two months to perform their downstream supply chain due diligence and complete their reports. In 2020, we contacted 141 relevant suppliers across our enterprise for a formal response through our reporting platform. 100% responded to our request. We review each submitted report for inconsistencies, and we address any issues through appropriate corrective action, including training, investigation and remediation.

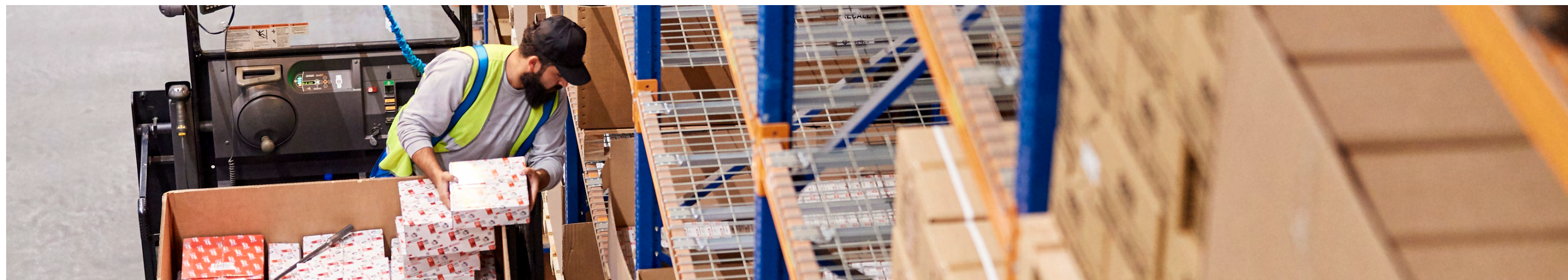
To improve consistency in reporting and the tools used for the process, we collaborate closely with the Automotive Industry Action Group (AIAG), Responsible Minerals Initiative (RMI) and our OEMs. We continue to educate suppliers on requirements regarding 3TG and employ an industry-wide approach for centralized collection of information to efficiently track data and respond to customer requests. In support of the Conflict-Free Smelter Program developed by RMI, we strive to obtain information and assistance from suppliers to trace the origin of any necessary 3TG.

Cobalt Reporting

As part of our continuous efforts to source responsibly and align with AIAG and OEMs, we included cobalt reporting in 2020 in our annual due diligence process. We added cobalt to our survey because of its connections to child labor and poor working conditions, and we continue to work with suppliers who report cobalt in their supply chains to understand the sources and opportunities for conflict-free mineral sourcing. As we become more aware of concerns, we will incorporate additional assessments into our reporting process to monitor performance in our supply chains.

We are actively involved in multiple industry groups to anticipate the next focus and prepare to report on additional minerals. For example, we are members of AIAG and RMI subgroups, including the Responsible Materials Information Sharing Subgroup, the Responsible Materials Work Group and the AIAG Smelter Engagement Team. Being part of these subgroups for conflict minerals keeps us aware of incoming regulations and enables us to contribute to the discussion. In addition, we continue to conduct internal training, promote awareness of conflict minerals internally and provide conflict minerals training for both suppliers and team members.

Supply Chain Management




In 2020, our supply chain enabled dependable production while maintaining our safety standards during the COVID-19 pandemic. We continue to monitor supplier conduct and hold suppliers accountable for meeting required environmental and social practices. Our supply chain management focuses on improving the sustainability and dependability of our supply chain to promote responsibility and efficiency in support of our customers. We are a global business and therefore have many partners across the world to support our delivery of high-quality products and services.

Management Approach

Standards

As outlined in our supplier requirements documents, we expect our suppliers and business partners to follow our standards for environmental, social and governance. We also commit to monitoring compliance with our standards, and expect suppliers to continuously improve their performance even after the initial procurement screening. To illustrate our commitment, we recently implemented the following goals and, we remain on track to achieve them:

Material Topic	Goal
 Supplier Management	<ul style="list-style-type: none"> 100% of strategic partners reaffirm their commitment to the Tenneco Code of Conduct by end of 2022. 100% of Tenneco's top sustainability "high-risk" and/or "high-impact" suppliers complete a self-assessment questionnaire by end of 2022.

To enforce our standards, we remain committed to monitoring our supply chain and performing due diligence for our suppliers. We perform regular on-site supplier audits to review compliance with Tenneco's standards for safe working conditions, and we also verify safe working conditions during the reassessment process. Supplier assessment questions include social, environmental, product quality, safety and business ethics topics.

We maintain effective procedures to address any ethics or compliance issues identified in our supplier interactions. We take appropriate actions to immediately remediate the issue or discontinue relationships with suppliers and other third parties that fail to meet our standards for lawful and ethical conduct. As part of our expectations, we prohibit the use of forced labor in any form, including human trafficking and slavery. To promote accountability, we provide the [Tenneco hotline](#) through multiple reporting channels for anyone to report any concerns or potential violations of our ethical values. We promptly investigate any reports and take necessary actions to address the risk. For more information, see the Ethics and Compliance section on [page 24](#).

Sustainability of Our Supply Chain

We strive to continuously contribute to a more efficient, responsible supply chain. As part of our strategy, we aim to include our own suppliers in our efforts to increase sustainability and deliver value for our customers. By eliminating waste and reducing greenhouse gas emissions in our supply chain, we can increase our efficiency to generate savings along our value chain and improve our business success.

To drive our sustainable growth, we continue to implement processes to track the performance of our suppliers while fostering a culture of innovation to support improvements. As we progress, we aim to collaborate with our suppliers to mitigate supply chain risks. With this information, we will enable more responsible growth and targeted improvements for our suppliers.

Supplier Training

We continue to communicate our standards and policies to our team members and suppliers to maintain compliance. In addition, we conduct internal training related to recognizing forced labor and fair working conditions, and we also provide relevant training materials across Tenneco to improve team member knowledge. To further support compliance, we require that every direct material supplier maintain a training program that covers our commitment to forced labor and working conditions. We also encourage all suppliers to take the AIAG Supply Chain Sustainability Knowledge Assessment and the AIAG Supply Chain Sustainability e-Learning.

Performance

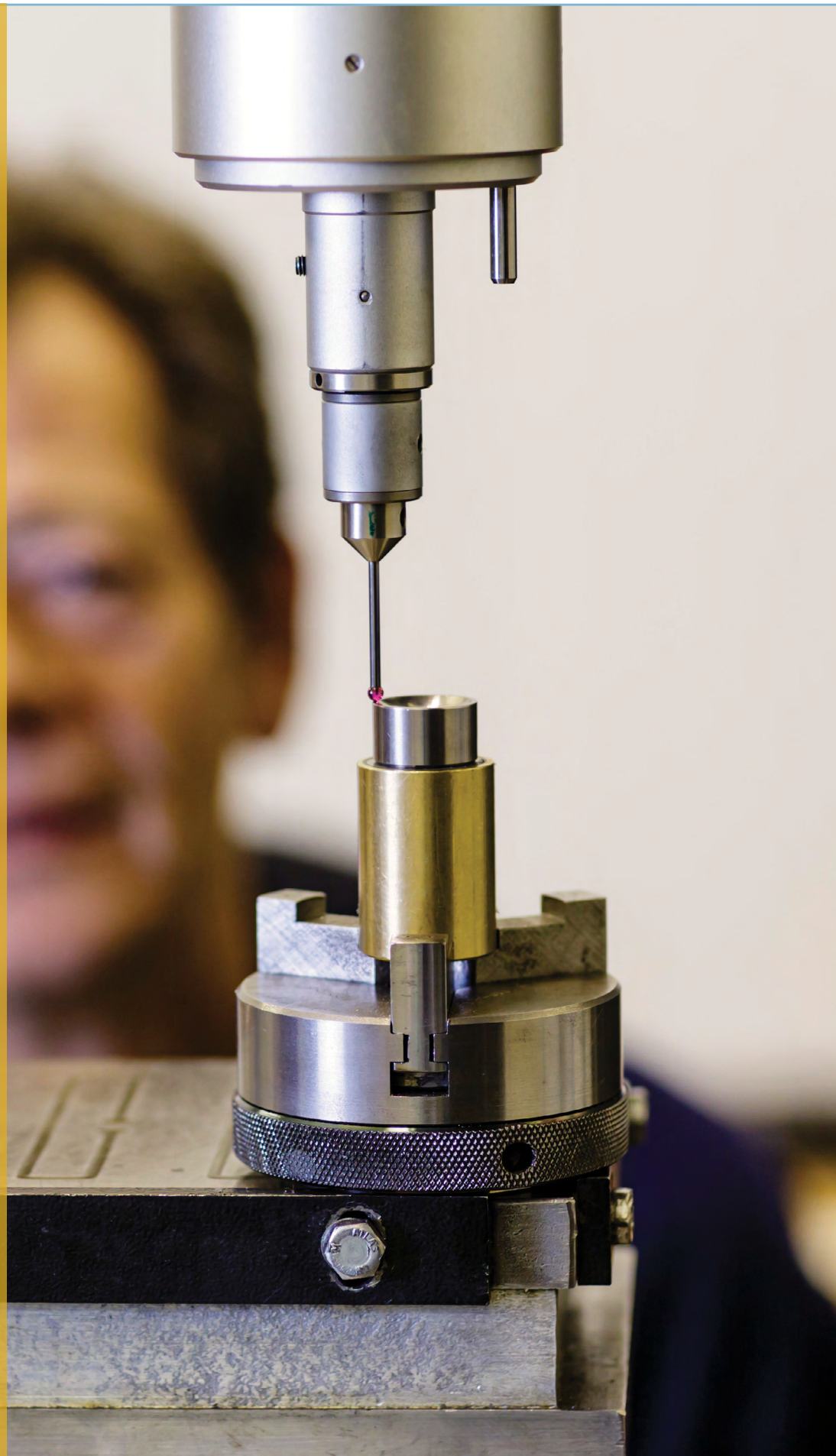
Metrics



Supplier Locations: North America, Europe, China, Mexico, the U.S. and India.

Materials/Inputs Supplied: Raw materials, coatings, packaging, stamping, steel, and other products.

Our Products



Positively contributing to the environment and society through our products.

Our extensive portfolio represents our culture of innovation and commitment to safe, efficient, high-quality products that are providing solutions for global mobility markets – today and tomorrow. We remain a leading global supplier in the automotive parts industry and are committed to developing sustainable processes and products that contribute to reduced CO₂ emissions and fuel efficiency. Our emission control products also reduce harmful criteria pollutants and enable our customers to comply with the latest emissions regulations.

We manufacture OE products for ride performance, emission systems and powertrains for nearly all OEMs worldwide. In addition, we offer world-leading brands for innovative products, including brands that have successfully delivered solutions for more than 100 years. As our business evolves, our Motorparts and Performance Solutions business units, as well as our commercial truck, off-highway and industrial offerings, will drive our growth. We are targeting a reduction in our portfolio exposure to OE light vehicle internal combustion engines to less than 20% through the end of the decade.

Skip to:

[Product Safety and Quality](#)

[Product Efficiency](#)

[Product Innovation](#)

Suggested Links:

[Product Compliance and Quality Policy](#)

Product Safety and Quality

We succeed within the automotive parts industry because of our commitment to quality excellence and customer satisfaction. Mitigating risks in our facilities and maintaining high product performance are how we establish our reputation as a trusted supplier. To provide reliability and protect customer safety, we implement thorough quality standards and leverage opportunities for continuous improvement. We strive to deliver superior products that reflect our rigorous assessments and meet requirements for compliance because our customers depend on our foundation of safety and quality.

Management

Quality Management

We implement quality management systems that represent leading practices and guide our processes to maintain quality and safety in our operations. Our quality management systems align with International Organization for Standardization (ISO) 9001 and International Automotive Task Force (IATF) 16949 for automotive business, AS9100 for aerospace business, ISO/TS 22163 for railway applications and VDA 6.3 for European OEMs.

Material Topic	Goal
 Product Safety and Quality	Achieve 100% certification with IATF 16949, ISO 9001 or other applicable quality management standards for manufacturing sites by end of 2025 to standardize quality governance.

These industry standards outline established, widely recognized procedures and direct our approach to quality management. In 2020, 97% of our manufacturing sites were certified in accordance with the IATF 16949 and/or ISO 9001 standards.

Our business units perform individual risk assessments to identify risks and present options for controls to reduce the probability of failure. Safety assessments at each phase of our quality management process help maintain our standards. Once we launch our products, we also incorporate customer feedback to continuously improve them. This cycle of continuous evaluation enables our thorough approach to quality and delivery of reliable products.



97%
IATF 16949 and/or ISO 9001 standard certification of our manufacturing sites.

Global Warranty Committee

The Global Warranty Committee (GWC) oversees product safety and quality to promote a cross-functional approach and manage escalation of any product warranty issues. The GWC represents executive and functional leaders from Engineering, Quality, Manufacturing Operations and Legal departments.

Our structured problem-solving process, overseen by the GWC, prevents problems and emphasizes continuous improvement to build solutions into future product development. The GWC maintains corporate-level responsibility for this system and prioritizes communication and collaboration between functions to holistically address risks.

The GWC has an escalation process for potential product safety and significant quality issues. Early notification and review both locally and at the corporate level facilitates learning and action where needed. It also provides a robust process to determine the company's regulatory and financial reporting obligations.

We also strive to monitor traceability of products as part of our compliance with quality regulations. We maintain traceability by reporting on raw materials in our products to the International Material Data System (IMDS) to comply with quality requirements for our components. Our Restricted Substance Management Standard (RSMS) also supports our guarantee that our customers receive parts that fully meet applicable legal and customer standards regarding materials in our products. This standard seeks to inform our suppliers of the materials we must exclude from Tenneco's products and the limits on the amounts of certain materials. We continue to update our process and monitor compliance with regulations.

Our Quality Policy

During 2020, we updated our approach to managing quality and safety as part of our efforts for continuous improvement, and we released a new [Product Compliance and Quality Policy](#) in early 2021. This framework aligns our strategy across our business units to consistently deliver effective, safe products. Our goal is to get it right the first time, every time.

Quality Audits

As part of our certification to ISO 9001 and IATF 16949 standards, we conduct third-party internal quality audits at our manufacturing sites. We also expect direct material suppliers to certify their quality management system to ISO 9001 standards. During the supplier approval process, we audit new direct material suppliers on quality management, as well as social and environmental criteria to confirm conformance with our requirements as outlined in our Supplier Manual.

Performance

We continually improve our processes for quality management to uphold our standards and reduce the risk of malfunction. In 2020, we proactively initiated a recall of less than 2,400 pieces because the performance did not meet our standards. No passenger fatalities or litigation was involved, and concerns were quickly addressed.

Metrics

Incidents of noncompliance concerning the health and safety impacts of products and services	2019	2020
Incidents of non-compliance with regulations resulting in a fine or penalty	0	0
Incidents of non-compliance with regulations resulting in a warning	0	0
Incidents of non-compliance with voluntary codes	0	0
Total number of incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services within the reporting period	0	0

Number of recalls issued, total units recalled ¹	2019	2020
Total number of recalls issued	0	3
Total number of units subject to a recall	0	2,340

For each recall, these units represent less than 1% of the units shipped. No legal proceedings or passenger fatalities occurred, and there was no cost to customers to remedy the issue. The recalls included the following:

- National Highway Traffic Safety Administration (NHTSA) No. 20E044 resulted in 996 recalled units due to the lower rear suspension control rods of certain low-floor buses potentially experiencing fatigue failure.
- NHTSA No. 20E064 resulted in 38 recalled units due to insufficient crimping during the manufacturing process.
- NHTSA No. 20E091 resulted in 1,306 recalled units due to a design compatibility issue related to the interface between the vehicle's top mount and the strut.

¹This table represents NHTSA recalls in the U.S. and any equivalent recalls in other countries. Tenneco is not aware of additional recalls. Tenneco identified a potential issue and voluntarily initiated the recalls.

Product Efficiency



At Tenneco, we develop products that support the next generation of hybrid and battery electric vehicles while also enabling more efficient internal combustion engines with fewer emissions. We drive advancements and contribute to improvements across a wide spectrum of vehicles, including those that incorporate alternative fuels, because our diverse portfolio of products applies to vehicles with multiple fuel types.

Due to our extensive experience in internal combustion engines, we are able to align with increasingly stringent vehicle emissions regulations, manage our downstream greenhouse gas emissions, and help our customers meet their ambitious fuel-efficiency targets. Simultaneously, a significant portion of our products support the transition to electrification by applying to any type of vehicles, including hybrid and battery electric vehicles.

Management Approach

Gaining efficiencies without compromising performance continues to be critical, and our ability to consistently deliver products that achieve these standards factors into our success as a leading supplier. Across Tenneco, many of our products contribute to reductions in vehicle mass and emissions, support the needs of electric and hybrid vehicles, and enable customers to meet fuel economy targets. Beyond the trend of light vehicles switching to electric and hybrid models, our products also help commercial truck and off-road vehicles to be more fuel-efficient and produce fewer emissions. The diversity of our capabilities allows Tenneco to facilitate the market transition to alternative fuels and hybrid and electric vehicles. We remain committed to providing solutions for global mobility markets – today and tomorrow.



41%
of revenue from products that contribute to fuel efficiency and/or emission reduction¹

Our engineering teams direct our investments in product efficiency and create roadmaps that outline the steps required to support customer demand. Our technology roadmaps guide our strategy for product development to drive our ability to meet and exceed customer needs.

We have formed a consistent approach to developing products that enhance efficiency and performance across the lifecycle of the vehicle. Our product roadmaps feature opportunities to target greenhouse gas emissions and vehicle propulsion efficiency while also providing fuel-agnostic components as applicable, focusing on customer needs throughout the process. As part of our process for product development and launch, we identify regulatory risks and opportunities through our Tenneco Product Launch System. Our evaluation process includes continuous checkpoints to maintain product quality and integrity.

In addition to identifying regulatory market opportunities, our process increases the probability that our research and development investments will result in successful customer adoption. We allocate appropriate internal resources to streamline project completion based on our assessments. Dependent on the efficiency of our products to meet their own goals, our customers also remain involved in our process by testing engines in the certification stage and performing durability tests for extended emissions compliance in the use phase.

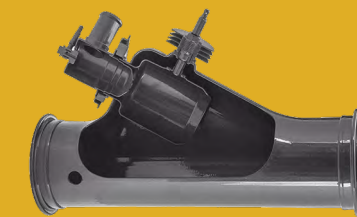
Driven by fuel economy standards, we are equipped for regulations that will be in place in 2025 and continue to reduce waste while prioritizing continuous improvement programs. We drive our growth by evaluating customer needs and developing roadmaps to guide our solutions into the future.


57.1M
Number of zero-copper brake pad sets sold to Tenneco OE and aftermarket customers

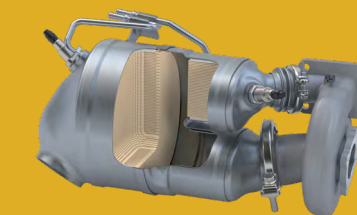
The Road to Making Tomorrow Better: Supporting Emissions Reductions

Tenneco offers fully optimized aftertreatment systems that contribute to engine fuel efficiency while significantly improving the air quality in our communities. We commercialized these aftertreatment solutions for large diesel engines in the marine, off-highway, industrial and power generation segments. Tenneco's large-engine aftertreatment solution converts over 90% of the nitrogen oxides (NOx) in the exhaust gas stream into harmless substances.

We focus on thermal management technologies to maintain the correct operating temperature for catalysts. We invest in multiple emission reduction technologies, including our Cold Start Thermal Unit and our Turbo bypass.



To promote a broader impact from our technology, our Clean Air business unit also recently partnered with Eaton to jointly develop our Cold Start Thermal Unit with Eaton's TVS® blower technology. This development will produce an integrated exhaust thermal management system, which will enable commercial truck and light vehicle manufacturers to meet new ultra-low NOx emissions regulations. The system will directly heat the vehicle's aftertreatment system to enable efficient conversion of NOx through the full range of operating conditions. Eaton's technology supports precise control of airflow to allow the Cold Start Thermal Unit to maintain optimal temperatures. By leveraging this collaboration, our business reduces harmful emissions and illustrates advancements in clean air technology.



Tenneco's Turbo bypass technology is being developed in collaboration with turbocharger suppliers and is targeted at fulfilling the upcoming Euro 7 regulations for passenger cars. The technology minimizes losses of engine heat during cold start conditions and allows ultra-fast catalyst light-off in traditional internal combustion engine and hybrid applications. This solution enables significant reduction of harmful pollutants in the most challenging conditions without adding significant cost or complexity to the exhaust system.

¹This reflects Clean Air and Powertrain segments only.

Our Technology

Our technology advancements enable our customers to meet fuel economy regulations and reach their own emission targets for their sustainability programs. These include:

- Supplying parts for all vehicle types, including hybrids and battery electric vehicles;
- Reducing noise and vibration for quieter engines;
- Increasing engine efficiencies for commercial truck and off-highway segments;
- Reducing copper usage and limiting friction in brakes; and
- Preventing vehicle deterioration and waste.

We design specialized coatings and components that reduce mass and friction and improve thermal and mechanical resistance, which support OEMs in reaching their goals for engine enhancements. For example, our light vehicle diesel steel pistons offer proven carbon emission reduction, and our IROX 2 polymer bearing coatings provide increased reliability to support higher-density, more efficient engines. In 2020, we won a **PACE Award** for our IROX 2 bearing coating, which extends the life of engine bearings, improves crankshaft performance and supports advanced, more efficient engine designs.

Our business provides the products that enable continued evolution of the internal combustion engine and reduce emissions from exhaust. We also enable the transition to a low carbon economy by delivering solutions that recover exhaust energy, reduce mass and backpressure, and improve fuel economy.

We also support long-lasting operating conditions that prevent fluid leakage or vehicle deterioration, which maintain vehicle lifespans to keep them out of landfills. Together, our products enable cleaner transportation, and valuable efficiency increases from multiple angles of vehicle improvement.

Another opportunity to influence efficiency concentrates on lightweight materials and regulatory compliance related to minimizing copper usage. For example, Tenneco is one of the first in the world to introduce a complete line of zero-copper brake pads more than 10 years ahead of mandated legislation that phased out the use of copper due to its adverse environmental impact.

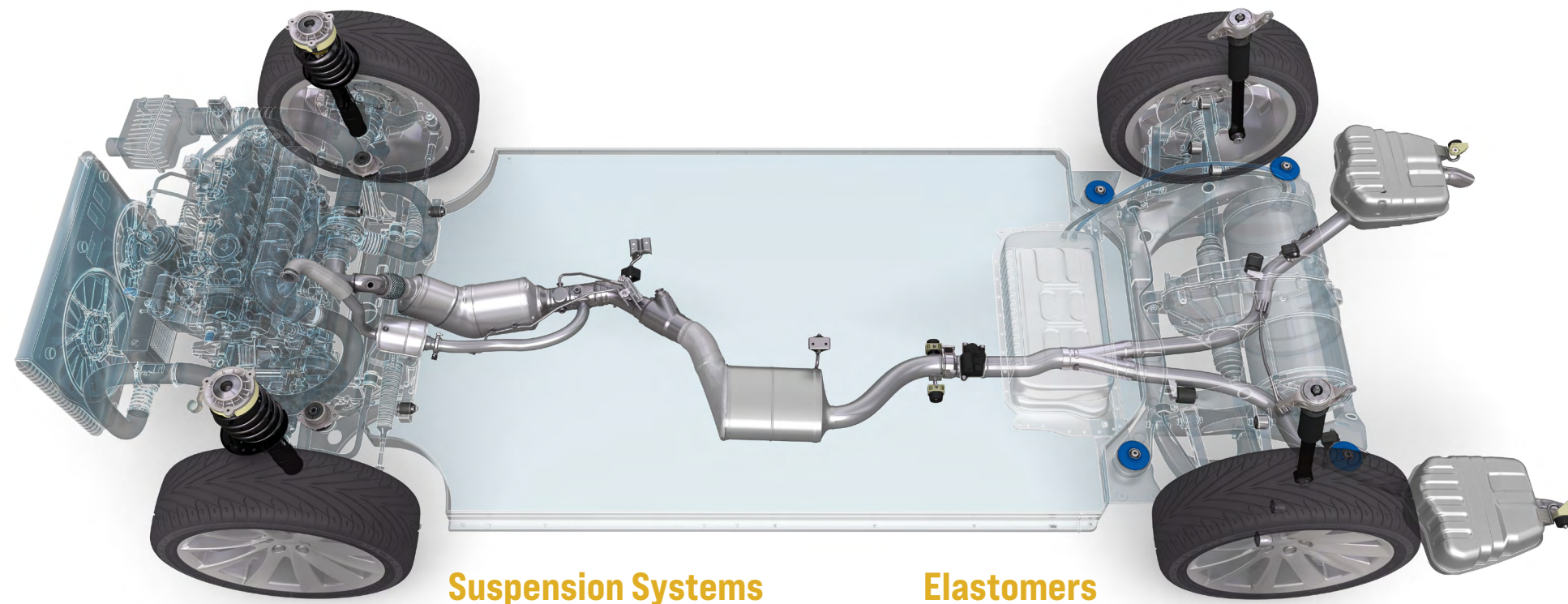


In 2020, we won a PACE Award for our IROX 2 bearing coating, which extends the life of engine bearings, improves crankshaft performance and supports advanced, more efficient engine designs.

Systems Protection

Powertrain Components

Exhaust Systems



Tenneco DLC



The Tenneco DLC (Diamond Like Coating) range of piston ring coatings, including CarboGlide and DuroGlide, provides the ultimate combination of low friction and exceptional durability in the most critical engine environments. DLC coated piston rings contribute to fuel economy savings up to 1.5%. In 2020, we also announced a new and exciting area of development in 'self-healing' coatings, which have the ability to heal scuffing during engine operation.

Goetze®



In 2020, we launched a new GOETZE range of industrial ignition solutions, designed for industrial gas engines and suitable for power generation applications, including natural gas, biogas, landfill gas and mine gas. The materials and design of the new GOETZE plugs are specifically chosen to perform reliably under adverse conditions and set unprecedented standards for service life and mechanical robustness. In testing, GOETZE-branded plugs achieve lifetimes of over 10,000 hours.

Performance

Metrics

Total revenue from products designed to increase fuel efficiency and/or reduce emissions during their use phase

2019* - \$6,516 Million (37%)

2020* - \$6,376 Million (41%)

*This reflects Clean Air and Powertrain segments only.



Tenneco is one of the first in the world to introduce a complete line of zero-copper brake pads more than 10 years ahead of mandated legislation that phased out the use of copper due to its adverse environmental impact.

Product Innovation

Our innovation strategy is increasingly important as technology evolves and customers continue to demand vehicle improvements. To drive our financial performance, we invest in research and development and strive to differentiate our business. We continue to illustrate the range of our capabilities and supply new technologies to enable the market transition as we incorporate modern advancements that support electrification and alternative fuels. By anticipating market needs, we offer innovative solutions to remain leaders in this transforming industry and drive value for our stakeholders.

Management Approach

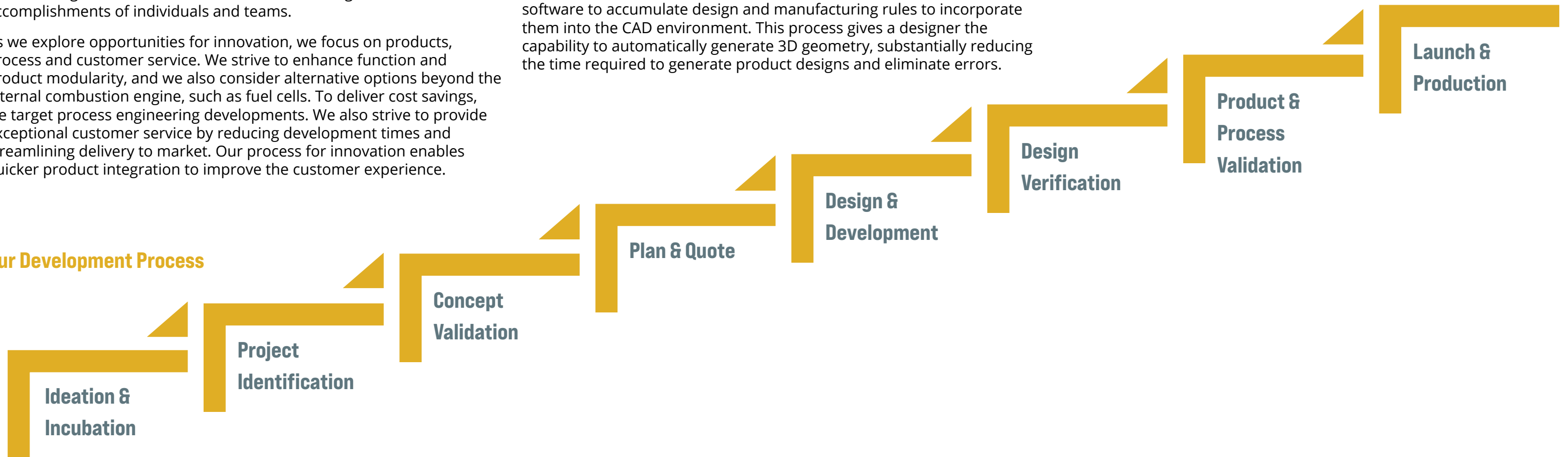
Our Strategy

We measure the success of our innovation by the benefits to our customers in terms of user satisfaction, costs and environmental performance. Our business units take a cross-functional approach to oversee product innovation by driving collaboration between sales, customer applications engineering, manufacturing, product engineering and process engineering functions. Our teams strategically determine future market needs, generate ideas for new products, solve problems through our designs, and manufacture technologies for analysis.

To encourage innovation across the organization, we have implemented patent award celebrations to recognize achievements. In 2020, we also held virtual global innovation award events to recognize the innovative accomplishments of individuals and teams.

As we explore opportunities for innovation, we focus on products, process and customer service. We strive to enhance function and product modularity, and we also consider alternative options beyond the internal combustion engine, such as fuel cells. To deliver cost savings, we target process engineering developments. We also strive to provide exceptional customer service by reducing development times and streamlining delivery to market. Our process for innovation enables quicker product integration to improve the customer experience.

Our Development Process



Standing Wave Management

This innovative strategy provides acoustic openings in pipes to reduce standing waves and tailpipe boom noise. We recognized the customer needs for both compact design and sound quality; we also developed this solution to enable customers to meet regulatory targets for criteria pollutants, fuel economy and muffler volume. Developed for each specific application, Standing Wave Management reduces engine order noise levels, acoustic tuning volume and hydraulic flow leakage to the surrounding environment. The reduction in complexity allows a decrease in weight and cost, and the compact design also is advantageous for use in hybrid vehicles.

Crushshield® System Protection

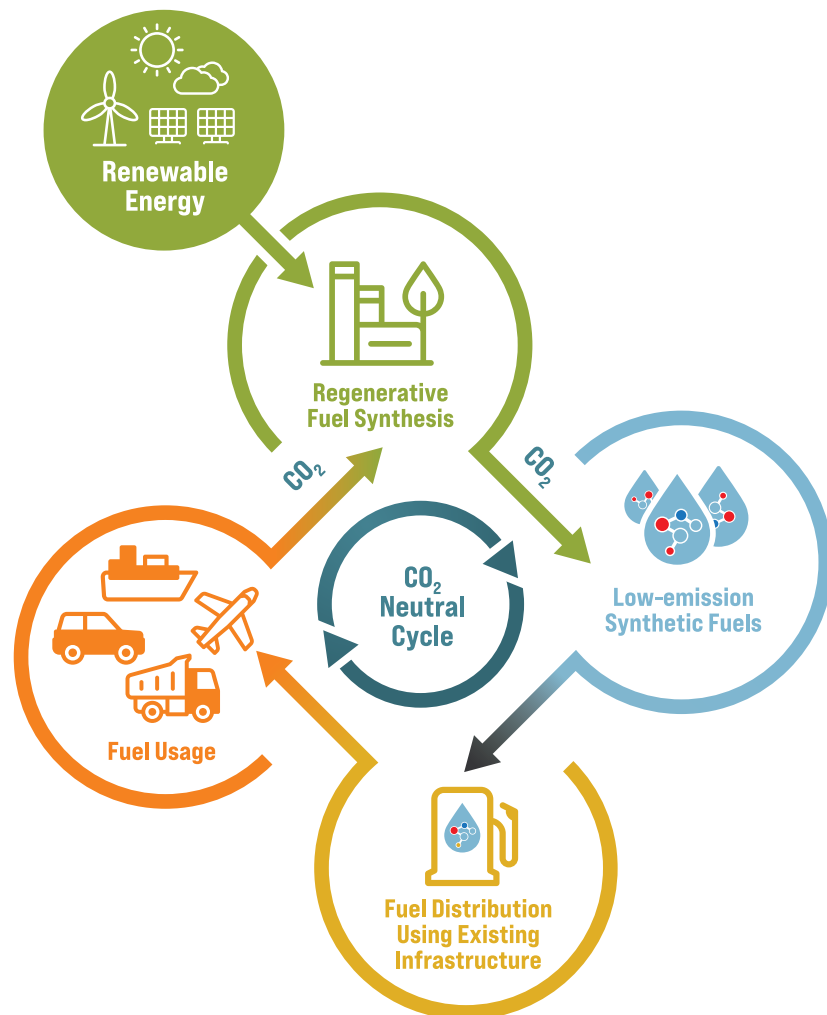
This self-wrapping sleeve is designed to provide superior cut-through protection for electrical cables in hybrids and electric vehicles. The tough, multilayer construction enables the product to absorb and disperse energy, and the ability to prevent cut-through attracts vehicle manufacturers concerned with isolating hybrid and electric vehicle cables from the vehicles' electricity-conducting chassis in crash situations. In production since 2012, the first application was the Toyota Prius, and the product has now been widely adopted today for many battery electric vehicle and hybrid electric vehicle applications, with an accelerating interest from major OEMs in 2020.

We use 3D printing technology for developing prototype parts. The Powertrain segment uses 3D printing to create casting dies for aluminum pistons, while our Clean Air business segment uses a design automation software to accumulate design and manufacturing rules to incorporate them into the CAD environment. This process gives a designer the capability to automatically generate 3D geometry, substantially reducing the time required to generate product designs and eliminate errors.

Tenneco Explores Synthetic Fuels for Climate-Neutral Mobility

In July 2021, Tenneco announced it is putting its 100-plus years of powertrain expertise in improving vehicle fuel efficiency and reducing emissions to work to explore synthetic fuels (e-fuels), a viable near-term solution to further maximize the efficiency and minimize the carbon footprint of internal combustion engines (ICE). Tenneco’s Powertrain business group is partnering with key academic and industry experts to examine the technical possibilities and commercial feasibility of synthetic fuels as a key technology to help the industry transition to climate-neutral transportation. This collaborative effort is referred to as the NAMOSYN project.

Synthetic fuels for passenger vehicles, commercial trucks or even marine applications can play an important role in achieving a near zero emissions mobility, by using renewable energy sources, such as solar or wind power, to create a closed CO₂ cycle when viewed from a holistic “well-to-wheel” perspective. A climate-neutral alternative to petroleum-based fuels, they also offer the potential for significantly reduced overall emissions, allowing Tenneco’s Clean Air experts to better manage any remaining pollutants through the aftertreatment process.



Synthetically produced, climate-neutral e-fuels can be used in today’s gasoline and diesel engines with only minor modifications for most of e-fuels and in blends with conventional fuels. This makes them particularly suitable for vehicles with traditional ICE as well as alternative powertrains such as hybrids. Additionally, the e-fuels can be made available to consumers by using mostly the existing, well-developed fuel distribution and filling station infrastructure with only minor adjustments, making the technology even more appealing as a near-term, fast-to-market solution.

To read the related press release, [click here](#).

Electric Vehicles

As part of our commitment to improving product efficiency and limiting our downstream impacts, we are a leader in the market transition within the automotive industry to alternative fuels. According to the [Global EV Outlook 2020](#) provided by the International Energy Agency, the number of electric cars on the road has increased from 17,000 in 2010 to 7.2 million in 2019, and this trend will continue as manufacturers and consumers around the world promote adoption of electric vehicles.

We are well-positioned to align our business with this global change because most of our products in our Performance Solutions and Motorparts business units are fuel-agnostic and therefore can be used on hybrid and battery electric vehicles. By contributing fuel-agnostic components to these vehicles, we integrate our business with this advancing technology and continue to drive improvements in efficiency across the automotive industry.

Approximately a third of the new business pipeline for Performance Solutions focuses on battery electric vehicles or hybrids. In 2021, we have planned multiple launches of programs for battery electric vehicles, hybrids or bike programs as we facilitate advancements in the industry.

In addition to fuel-agnostic products, our Performance Solutions business unit leverages knowledge of suspension bushings, subframes and mounts to provide reductions in noise and vibration. To support electric designs, we provide technologies that reduce harsh vibrations for electric vehicles, since noise from vehicle parts becomes more evident with quieter engines. Customers use these advanced products to build quiet electric vehicles, which present different engineering challenges compared to vehicles with internal combustion engines.


1/3
of the new business pipeline for Performance Solutions focuses on electric vehicles

Our Transformation

Our adaptability continues to advance solutions for more efficient vehicle technologies, and our overall business still benefits because of the range of our capabilities. For example, a portion of our business supports the commercial truck and off-highway segment that may not become electric as quickly as the light vehicle segment. As we enhance efficiency by supplying components for light electric vehicles, we have the flexibility to continue improving efficiency through the internal combustion engine in the commercial truck and off-highway segment, which may have a longer transition to electrification. Another offering in our aftermarket business, our Walker products, also improves vehicle efficiency by restoring the OE emissions control standards on older vehicles.

Performance

Metrics

We assess our product innovation performance through unique measures and metrics for each business segment that indicate success. These include product cost leadership; superior functionality; advancement of technology; vehicle dynamics/integrated systems expertise; providing noise, vibration and harshness solutions and offering leading aftermarket brands.

	2020
Number of parts produced ¹	4,816,862,704
Area of manufacturing plants	3.34 million square meters

¹The data included here reflects the number of parts shipped, because we do not track the number of parts produced for each business unit.

Percentage of products sold that are recyclable	2019	2020
Percentage of products sold, by revenue, that are recyclable	91%	91%

Appendix



Skip to:

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[Appendix C - Stakeholder Engagement](#)

[Appendix D - Materiality Assessment](#)

Appendix A - Additional Performance Data

Talent Attraction and Retention

Information on employees and other workers ¹	2020	
Percent of total employees by employment contract (permanent and temporary), by gender	Permanent	
	Male	77%
	Female	23%
	Temporary	
	Male	Undisclosed
	Female	Undisclosed
Percent of total employees by employment contract (permanent and temporary), by region	Permanent	
	Asia Pacific	19%
	Americas	41%
	EMEA	40%
	Temporary	
	Asia Pacific	16%
	Americas	65%
EMEA	20%	
Percent of total employees (full-time and part-time), by gender	Full-time and Part-time	
	Male	77%
	Female	23%
Whether a significant portion of the organization's activities is performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees.	Tenneco does use non-employee workers occasionally to flex our manufacturing workforce to meet non-permanent increases in customer demand. However, we do not see this as a significant portion of our workforce.	
Any significant variations in the numbers reported (such as seasonal variations in the tourism or agricultural industries)	Tenneco does not experience significant variation in employment numbers due to seasonal employment.	
An explanation of how the data have been compiled, including any assumptions made	Data was pulled from the Tenneco HR Core system. Only active and inactive company employees were included. We did not include system splits in termination reporting.	

¹Information combines data for full-time and part-time employees. We do not currently track the global breakdown for full-time and part-time, but we continue to improve our reporting processes.

New employee hires and employee turnover		2019		2020	
New Hires by:		#	% of Total Employees ²	#	% of Total Employees ²
Region	Asia Pacific	1,595	11%	2,139	15%
	Americas	6,150	20%	7,129	23%
	EMEA	2,465	9%	1,764	6%
	Other/Blank	0	0%	0	0%
Gender	Male	7,324	13%	8,066	14%
	Female	2,884	17%	2,966	17%
	Not Declared	2	-	0	0%
Age	<30 Years	4,973	39%	5,719	44%
	30-50 Years	4,497	11%	4,583	11%
	>50 Years	740	4%	730	4%
Turnover by ³ :		#	% of Total Employees ⁴	#	% of Total Employees ⁴
Region	Asia Pacific	1,996	14%	2,530	18%
	Americas	6,958	23%	8,610	28%
	EMEA	2,926	11%	3,340	11%
	Other/Blank	0	0%	0	0%
Gender	Male	8,670	15%	10,627	18%
	Female	3,210	19%	3,853	23%
Age	<30 Years	4,404	35%	4,770	37%
	30-50 Years	5,492	14%	6,508	15%
	>50 Years	1,984	10%	3,202	16%

² Reflects the number of new hires as a percentage of total headcount in that category (region, gender or age) at the end of the year.

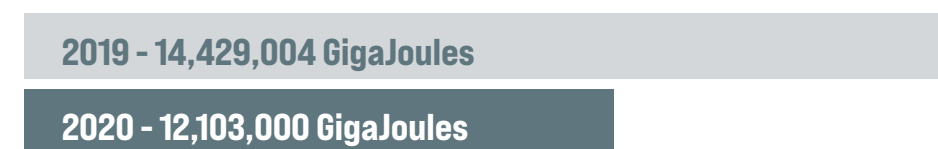
³ Employees who leave the organization voluntarily or due to dismissal, retirement, or death in service

⁴ Reflects the total number of employees who leave the organization as a percentage of total headcount in that category (region, gender or age) at the end of the year.

Appendix A - Additional Performance Data

Energy and Greenhouse Gas Emissions

Total energy consumption¹



Gross direct (Scope 1) GHG emissions²



Energy indirect (Scope 2) GHG emissions²



¹Through improved data integrity, verification sources and additional data, we have recalculated our 2019 total energy consumption, resulting in an increase over the previously reported total. We will use this recalculated number as the baseline for our 2030 reduction goals.

²The calculations for both years include CO₂, CH₄ and N₂O. The base year is 2019, per Tenneco's new long-term reduction goals. We used emissions factors from the IEA and EPA, and used global warming potential (GWP) rates from the IPCC. We used operational control for our consolidation approach for emissions, and we incorporated standards and methodologies from the Greenhouse Gas Protocol and from GRI Standards. We had 6.7 Metric Tons of biogenic CO₂ emissions in 2019 and 2020. Using improved methodologies, data integrity and emission factors, we have recalculated our 2019 Scope 1 and Scope 2 GHG emissions, resulting in a decrease over the previously reported total. We will use this recalculated number as the baseline for our 2030 reduction goals.

Water Withdrawal

Water Withdrawal	2018	2019	2020
Total water withdrawn in Megaliters	9,404	9,095	7,754

Occupational Health & Safety

Contractor Safety

Through the controls in our Contractor EHS Management Process, contractors in our workplace follow the same safety requirements as our team members. Our contractor safety program establishes processes to identify and communicate any hazards and evaluate and control risks. We also inform contractors of key regulatory requirements and highlight Tenneco's requirements that exceed any regulations. We continue to monitor safety criteria and require contractors to attend safety training to maintain compliance with our procedures for safe work.

Work-related injuries	2019		2020	
	Number	Rate	Number	Rate
Team members				
Fatalities from work-related injuries	N/A	N/A	0	0
Recordable work-related injuries	585	0.67	394	0.54
Number of hours worked	189,123,469		146,696,397	

These rates have been calculated based on 200,000 hours worked, and no workers were excluded from this disclosure. We used OSHA standards to compile the data.

Appendix B - SASB/GRI Index

SASB Index

Below is Tenneco's response to the SASB Index, an industry-specific reporting framework that allows investors to more easily compare ESG performance across industry peers. Tenneco reports under the Auto Parts industry. The response column of this table indicates where you can find more information about each topic.

Topic	Metric	Code	Response	Omission
Energy Management	1. Total energy consumed	TR-AP-130a.1	Page 13	
	2. Percentage grid electricity			
	3. Percentage renewable			
Waste Management	1. Total amount of waste from manufacturing	TR-AP-150a.1	Page 14	
	2. Percentage hazardous			
	3. Percentage recycled			
Product Safety	Number of recalls issued, total units recalled	TR-AP-250a.1	Page 32	
Design for Fuel Efficiency	Revenue from products designed to increase fuel efficiency and/or reduce emissions	TR-AP-410a.1	Page 33	
Material Sourcing	Description of the management of risks associated with the use of critical materials	TR-AP-440a.1	Page 29	
Material Efficiency	Percentage of products sold that are recyclable	TR-AP-440b.1	Page 36	This information has not been tracked in the past. We will set the baseline and start reporting this information in 2021.
	Percentage of input materials from recycled or re-manufactured content	TR-AP-440b.2	NA	
Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	TR-AP-520a.1	Page 25	

Appendix B - SASB/GRI Index

GRI Content Index

GRI Disclosure	Report Section or Direct Response	Page #	Omissions	
GRI General Disclosures				
Organizational Profile				
GRI 102: General Disclosures 2016	102-1: Name of the organization	Tenneco Inc.	N/A	
	102-2: Activities, brands, products, and services	Tenneco Overview	8	
	102-3: Location of headquarters	500 North Field Drive Lake Forest, Illinois	N/A	
	102-4: Location of operations	Tenneco Overview	8	
	102-5: Ownership and legal form	Tenneco Overview; 2020 10-K	8	
	102-6: Markets served	Tenneco Overview	8	
	102-7: Scale of the organization	Tenneco Overview	8	
	102-8: Information on employees and other workers	Talent Attraction and Retention	38	Information combines data for full-time and part-time employees. We do not currently track the global breakdown for full-time and part-time, but we continue to improve our reporting processes.
	102-9: Supply chain	Supply Chain Management	30	
	102-10: Significant changes to the organization and its supply chain	There were no significant changes in 2020.	N/A	
	102-11: Precautionary Principle or approach	Tenneco does not formally apply the Precautionary Principle.	N/A	
	102-12: External initiatives	Tenneco does not subscribe to external initiatives but refers to the Global Reporting Initiative and Sustainability Accounting Standards Board frameworks for sustainability reporting.	N/A	
	102-13: Membership of associations	Tenneco is a member of the following associations: <ul style="list-style-type: none"> Automotive Industry Action Group Board of Directors and the Supply Chain Steering Committee Automotive Aftermarket Suppliers Association European Association of Automotive Suppliers Sustainability/CSR Expert Group Original Equipment Suppliers Association 	N/A	
Strategy				
GRI 102: General Disclosures 2016	102-14: Statement from senior decision-maker	CEO Letter	3	
Ethics and Integrity				
GRI 102: General Disclosures 2016	102-16: Values, principles, standards and norms of behavior	Tenneco Values	9	
	102-17: Mechanisms for advice and concerns about ethics	Ethics and Compliance	24	
Governance				
GRI 102: General Disclosures 2016	102-18: Governance structure	Corporate Governance	23	
	102-20: Executive-level responsibility for economic, environmental, and social topics	Corporate Governance	23	
	102-21: Consulting stakeholders on economic, environmental, and social topics	Corporate Governance	23	
	102-30: Effectiveness of risk management processes	Corporate Governance	23	
	102-32: Highest governance body's role in sustainability reporting	Corporate Governance	23	

GRI Disclosure		Report Section or Direct Response	Page #	Omissions
Stakeholder Engagement				
GRI 102: General Disclosures 2016	102-40: List of stakeholder groups	Appendix C	45	
	102-41: Collective bargaining agreements	Labor Relations	20	
	102-42: Identifying stakeholders	Our Sustainability Journey	5	
	102-43: Approach to stakeholder engagement	Our Sustainability Journey	5	
	102-44: Key topics and concerns raised	Our Sustainability Journey; Appendix C	5, 45	
Reporting Practices				
GRI 102: General Disclosures 2016	102-45: Entities included in consolidated financial statements	Tenneco Overview; 2020 10-K	8	
	102-46: Defining report content and topic Boundaries	Our Sustainability Journey	5-6	
	102-47: List of material topics	Appendix D	46	
	102-48: Restatements of information	Information from past reports has been restated in this report due to improvements in data availability and calculation methodologies. Any changes are noted throughout the report.	13	
	102-49: Changes in reporting	Tenneco performed a materiality assessment and developed a sustainability strategy in 2020, both of which influenced the content of this report.	5-6	
	102-50: Reporting period	The report covers our performance from January 1, 2020 to December 31, 2020, unless otherwise stated.	1	
	102-51: Date of most recent report	About This Report	2	
	102-52: Reporting cycle	About This Report	2	
	102-53: Contact point for questions regarding the report	About This Report	2	
	102-54: Claims of reporting in accordance with the GRI Standards	About This Report	2	
	102-55: GRI Content Index	GRI Content Index	41	
	102-56: External assurance	This report has not been externally assured.	N/A	
GRI General Disclosures				
Anti-corruption				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Ethics and Compliance	24	
	103-2: The management approach and its components	Ethics and Compliance	24	
	103-3: Evaluation of the management approach	Ethics and Compliance	25	
GRI 205: Anti-corruption 2016	205 - 1: Operations assessed for risks related to corruption	Ethics and Compliance	25	
Anti-competitive Behavior				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Ethics and Compliance	24	
	103-2: The management approach and its components	Ethics and Compliance	24	
	103-3: Evaluation of the management approach	Ethics and Compliance	25	
Energy				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Energy and Greenhouse Gas Emissions	13	
	103-2: The management approach and its components	Energy and Greenhouse Gas Emissions	13	

GRI Disclosure		Report Section or Direct Response	Page #	Omissions
Energy				
GRI 103: Management Approach 2016	302-4: Reduction of energy consumption	Energy and Greenhouse Gas Emissions	13	Due to the global pandemic, production levels at our facilities around the world were impacted, lowering our energy demand. Our 2020 energy reduction metrics do not reflect normal operations; we were unable to isolate reductions from energy efficiency projects. We are working to improve our data collection process and plan to report on our progress in future reports.
Emissions				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Energy and Greenhouse Gas Emissions	13	
	103-2: The management approach and its components	Energy and Greenhouse Gas Emissions	13	
	103-3: Evaluation of the management approach	Energy and Greenhouse Gas Emissions	13	
GRI 305: Emissions 2016	305-1: Direct (Scope 1) GHG emissions	Energy and Greenhouse Gas Emissions	39	
	305-2: Energy indirect (Scope 2) GHG emissions	Energy and Greenhouse Gas Emissions	39	
Supplier Environmental Assessment				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Responsible Sourcing	27	
	103-2: The management approach and its components	Responsible Sourcing	27	
	103-3: Evaluation of the management approach	Responsible Sourcing	27	
GRI 103: Management Approach 2016	308-1: New suppliers that were screened using environmental criteria	Responsible Sourcing	27	
Employment				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Talent Attraction and Retention	17-18	
	103-2: The management approach and its components	Talent Attraction and Retention	17-18	
	103-3: Evaluation of the management approach	Talent Attraction and Retention	17	
GRI 401: Employment 2016	401-1: New employee hires and employee turnover	Appendix A	38	
Labor/Management Relations				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Labor Relations	20	
	103-2: The management approach and its components	Labor Relations	20	
	103-3: Evaluation of the management approach	Labor Relations	20	
GRI 402: Labor/Management Relations 2016	402-1: Minimum notice periods regarding operational changes	Labor Relations	20	Notice periods vary regionally. Tenneco follows all local regulations for minimum notice periods. For example, the minimum notice period for plant closure or significant reduction is 60 days of notice per the Worker Adjustment and Retraining Notification Act (WARN) Act in the U.S.

GRI Disclosure		Report Section or Direct Response	Page #	Omissions
Occupational Health and Safety				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Occupational Health and Safety	16	
	103-2: The management approach and its components	Occupational Health and Safety	16	
	103-3: Evaluation of the management approach	Occupational Health and Safety	16	
GRI 402: Labor/Management Relations 2016	403-1: Occupational health and safety management system	Occupational Health and Safety	16	
	403-2: Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety	16	
	403-3: Occupational health services	Occupational Health and Safety	16	
	403-4: Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety	16	
	403-5: Worker training on occupational health and safety	Occupational Health and Safety	16	
	403-6: Promotion of worker health	Responding to COVID-19	11	
	403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		N/A	Information is currently unavailable. Tenneco will evaluate impacts linked by business relationships in the future.
	403-9: Work-related injuries	Occupational Health and Safety	16	Tenneco continues to improve reporting processes and will work to separately collect contractor data and record high-consequence injuries.
Diversity and Equal Opportunity				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Inclusion, Diversity and Equity	19	
	103-2: The management approach and its components	Inclusion, Diversity and Equity	19	
	103-3: Evaluation of the management approach	Inclusion, Diversity and Equity	19	
GRI 405: Diversity and Equal Opportunity 2016	405-1: Diversity of governance bodies and employees	Inclusion, Diversity and Equity; Corporate Governance	19, 23	
Supplier Social Assessment				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Responsible Sourcing	27	
	103-2: The management approach and its components	Responsible Sourcing	27	
	103-3: Evaluation of the management approach	Responsible Sourcing	27	
GRI 405: Diversity and Equal Opportunity 2016	414-1: New suppliers that were screened using social criteria	Responsible Sourcing	27-28	
Customer Health and Safety				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Product Safety and Quality	32	
	103-2: The management approach and its components	Product Safety and Quality	32	
	103-3: Evaluation of the management approach	Product Safety and Quality	32	
GRI 405: Diversity and Equal Opportunity 2016	416-2: Incidents of non-compliance concerning the health and safety impacts of products and services	Product Safety and Quality	32	

GRI Disclosure		Report Section or Direct Response	Page #	Omissions
Corporate Governance (Non-GRI Topic)				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Corporate Governance	23	
	103-2: The management approach and its components	Corporate Governance	23	
Corporate Governance (Non-GRI Topic)				
GRI 103: Management Approach 2016	103-3: Evaluation of the management approach	Corporate Governance	23	
Self-Selected Metric	Diversity of governance bodies	See GRI 405-1	23	
Product Efficiency (Non-GRI Topic)				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Product Efficiency	33	
	103-2: The management approach and its components	Product Efficiency	33	
	103-3: Evaluation of the management approach	Product Efficiency	34	
Self-Selected Metric	Total revenue from products designed to increase fuel efficiency and/or reduce emissions during their use phase	Product Efficiency	34	
Product Innovation (Non-GRI Topic)				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	Product Innovation	35	
	103-2: The management approach and its components	Product Innovation	35	
	103-3: Evaluation of the management approach	Product Innovation	36	
Self-Selected Metric	Percentage of products sold that are recyclable	Product Innovation	36	
Additional Indicators				
Customer Privacy				
GRI 418: Customer Privacy	418-1: Substantiated complaints concerning breaches of customer privacy and losses of customer data	Cybersecurity and Data Privacy	26	

Appendix C - Stakeholder Engagement

The table below summarizes our engagement activities with key stakeholders, including the frequency of our engagements and the relevant topics.

Stakeholder	How We Engage	Key Topics of Importance
Team Members	<ul style="list-style-type: none"> • Hold town hall and team member meetings, global webcasts, picnics and special events, training and development, and recognition programs annually • Participate at annual Euroforum • Host Corporate Social Responsibility and Sustainability Council meetings quarterly • Update Enterprise Risk Management annually • Perform team member engagement surveys at least every two years 	<ul style="list-style-type: none"> • Business performance • Inclusion, Diversity and Equity • Safety • Training and development
Customers	<ul style="list-style-type: none"> • Participate in Ford's Partnership for a Cleaner Environment program annually • Host customer technology days and step-level meeting with customers annually • Participate in customer Sustainability initiatives, e.g., BMW Sustainability Training for Suppliers, Scania Sustainability Supplier Day annually • Participate in Automotive REACH Task Force annually 	<ul style="list-style-type: none"> • Customer service • Management of restricted substances • Product safety • Product quality • Sustainability-related risks and opportunities
Investors	<ul style="list-style-type: none"> • Hold annual shareholder meeting • Host quarterly webcasts to discuss financial results • Participate in global investor and industry conferences throughout the year • Submit quarter/annual and other SEC filings 	<ul style="list-style-type: none"> • Business performance • Corporate governance • Executive compensation • Regulatory risks • Sustainability-related risks and opportunities
Communities	<ul style="list-style-type: none"> • Provide site visits and plant tours • Partner with local charitable organizations and schools • Support annual charitable fundraising campaigns 	<ul style="list-style-type: none"> • Air quality • Business performance • Corporate giving • Corporate taxes • Local employment • Safety
Suppliers	<ul style="list-style-type: none"> • Participate in Automotive Industry Action Group • Maintain Supplier Diversity Program annually • Perform supplier audits • Complete screenings on new suppliers 	<ul style="list-style-type: none"> • Business performance • Conflict Minerals • Supplier growth • Supplier diversity • Waste management
Government and Regulatory Agencies	<ul style="list-style-type: none"> • Engage with the Environmental Protection Agency on emissions reduction strategies on an ongoing basis 	<ul style="list-style-type: none"> • Air quality • Compliance • Greenhouse gas emissions • Public health and safety
Trade Associations	<ul style="list-style-type: none"> • Sit on the Automotive Industry Action Group Board of Directors and the Supply Chain Steering Committee • Participate in the Automotive Aftermarket Suppliers Association quarterly meetings • Participate in the European Association of Automotive Suppliers Sustainability/CSR Expert Group quarterly meetings 	<ul style="list-style-type: none"> • Public policy • Product quality • Product safety • Supply chain management • Transparency

Appendix D - Materiality Assessment

Performance

Metrics

Material Topics	Important Topics
Corporate governance	Air quality
Energy and greenhouse gas emissions	Circular economy
Ethics and compliance	Climate change
Inclusion, Diversity and Equity	Communication and marketing
Labor relations	Community involvement
Occupational health safety	Conflict materials
Product efficiency	Consumer demand
Product innovation	Cybersecurity and data privacy
Product safety and quality	Economic development
Responsible sourcing	Human rights
Talent attraction and retention	Operational waste
	Supply chain management
	Talent development
	Water

Contractor Safety

Our materiality assessment enables strategic focus on issues where we have the greatest risks, opportunities and impacts. In addition to monitoring all topics, we prioritize transparency for material topics throughout this report because of their high importance to the business and to stakeholders.

We consider climate change to be integrated throughout the list of material topics because we target our climate-related impacts through multiple topics, including energy and greenhouse gas emissions and product efficiency. We target reductions through our own actions and through the use of our products.



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