*it's in the wind*®

**tpi** COMPOSITES®

# *Contents*

# *OVERVIEW*

## Our Vision

To lead the energy transition through advanced technology and innovative solutions.

## Our Mission

We deliver innovative and sustainable solutions to decarbonize and electrify the world by expanding the adoption of renewable energy while providing exceptional value to our customers and stakeholders. We accomplish this by cultivating an inclusive culture that attracts, develops, excites and retains exceptional talent.

## Our Core Values

- *Safety*

- *Operational Excellence*

- *Commitment*

- *Integrity*

- *Leadership*

## Decarbonize & Electrify

This report provides information regarding the environmental, social, and governance (ESG) efforts of TPI Composites, Inc. (TPI or the Company) for the 2021 calendar year. We aligned our material topics with the Global Reporting Initiative (GRI). This report has been prepared in accordance with the GRI Standards: Core Option. The accompanying GRI index is in section 12 of this report. This report also addresses the Sustainability Accounting Standards Board (SASB) standards of Wind Technology & Project Developers and Electrical & Electronic Equipment, which we find relevant to our industry, and the accompanying SASB Disclosures are in section 13 of this report. Additionally, we have prepared Task Force on Climate-Related Financial Disclosures (TCFD) that can be found in section 14 of this report.

DNV, an independent, third-party assurance provider, conducted a limited-level assurance on selected performance indicators within this report, including select SASB Standards and GRI indicators. Assurance details can be found in the Independent Assurance Statement in section 15. External assurance has also been provided for our direct economic impacts via the auditing that occurs for our Form 10-K.

**Contact Information**

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Published: March 31, 2022

## 1 | Message from the CEO

It has been my long-standing desire for TPI to set the "Gold Standard" when it comes to ESG performance. It is not a singular destination; rather, it is our ongoing commitment to improve the well-being of our associates, communities, and our environment. In 2020, we publicly stated our strategic ESG goals, which are highlighted on page 13 in this report, and I would like to share some of our 2021 achievements:

- Strengthened our behavioral-based safety programs, which ensured TPI achieved its safety goals

- Achieved our process waste rate reduction goal

- Improved our overall diversity, equity, and inclusion (DE&I) survey score by 6%, and signed the CEO Pledge for Action as part of the CEO Action for Diversity and Inclusion business commitment

- Added solar power at two of our facilities, which reduced carbon emissions by over 4,500 tons of $CO_2e$ or the equivalent of removing 1,000 cars from our roads in one year

While proud of the accomplishments TPI made during 2021, we continue to stay resolute in our ESG journey as we:

- Continue to advance wind blade recycling and innovation in wind blade circularity

- Diversify our Board of Directors and Global and U.S. Leadership Teams

- Aggressively reduce our scope 1, 2, and 3 emissions to become carbon neutral by 2030 with 100% of our energy being procured from renewable sources

- Maintain, promote, and identify new ways to enhance associate safety

I am very grateful to work for an organization that provides direct and long-term environmental benefits. During this past year, our 14,100 associates produced wind blades capable of generating an estimated 13 gigawatts, which represented approximately 32% of the global onshore wind energy market, excluding China. The wind blades we produced in 2021 have the potential to contribute to a reduction in greenhouse gas emissions of approximately 422 million metric tons of $CO_2$ over their average 20-year life span, which is equivalent to the use of over 77 million homes' electricity use for one year in the United States.
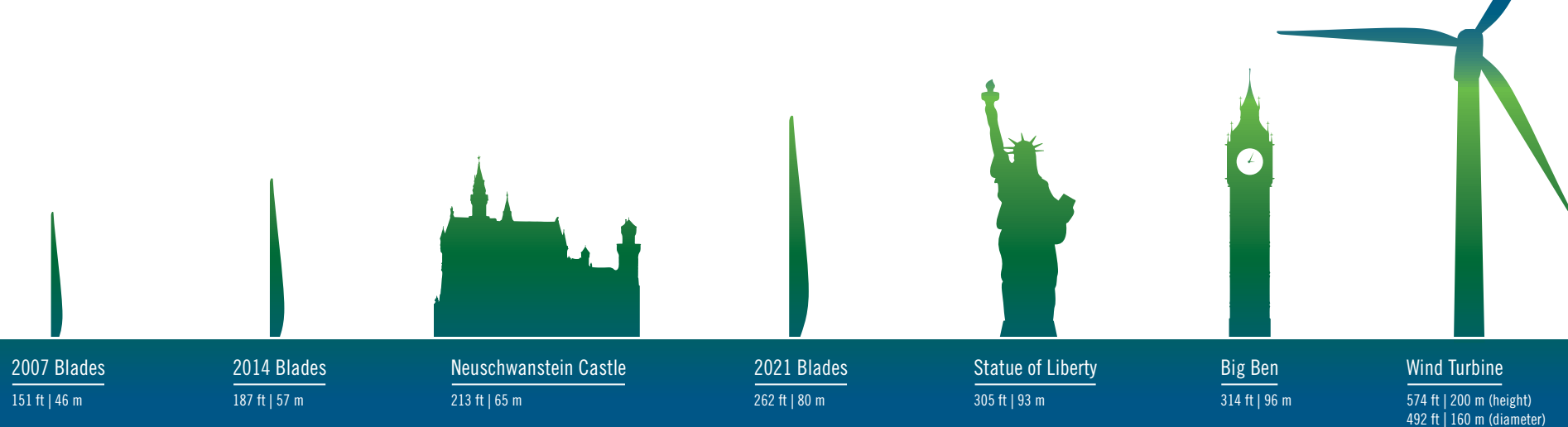
We look forward to continuing our ESG journey as we strive to set the ESG "Gold Standard."

Bill Siwek
President and CEO

## TPI Wind Blades Throughout the Years

| 2007 Blades | 2014 Blades | Neuschwanstein Castle | 2021 Blades | Statue of Liberty | Big Ben | Wind Turbine |
|---|---|---|---|---|---|---|
| 151 ft | 46 m | 187 ft | 57 m | 213 ft | 65 m | 262 ft | 80 m | 305 ft | 93 m | 314 ft | 96 m | 574 ft | 200 m (height) 492 ft | 160 m (diameter) |

## 2 | About TPI

We are a leading wind blade manufacturer and the only independent wind blade manufacturer with a global footprint. We accounted for approximately 32% of all onshore wind blades on a MW-basis globally in 2021, excluding China. We reached a record high this year with more than $1.7 billion in net sales and produced more than 9,700 wind blades. We are enabling many of the industry's leading wind turbine original equipment manufacturers (OEMs) to outsource the manufacturing of a larger portion of their wind blades, thus expanding their global wind blade capacity. We manufacture advanced composite products to our customers' exact specifications in facilities designed, built, and strategically located either near our customers' target markets or in low-cost world class locations, to minimize total delivered cost. In addition, we provide global field service maintenance and repairs for wind turbine OEMs and asset owners by leveraging our global footprint

and approximately 14,100 capable associates. We are building a growing global team of experienced technicians to provide best-in-class wind blade service capabilities. We also apply our advanced composite technology and innovation to supply unique, high-strength, lightweight and durable composite product solutions for transportation markets, including passenger automotive, bus, truck, and delivery vehicle applications.

### Associates at a Glance

Total
**14,100**

- U.S. | 600
- Asia | 1,400
- EMEA | 4,100
- India | 1,600
- Mexico | 6,300
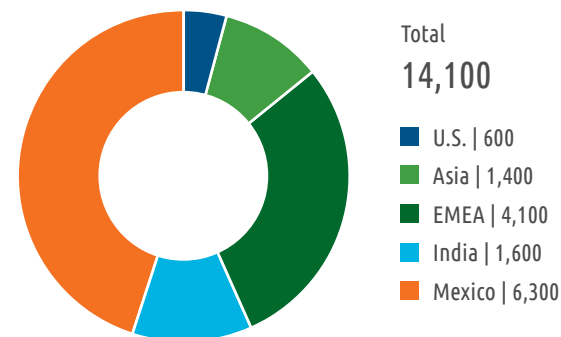
The wind blades we manufacture support the decarbonization of energy production, provide significant reductions in greenhouse gas (GHG) emissions, and help mitigate climate change. The wind blades that we produced from 2017 to 2021 have the potential to reduce more than 1.5 billion metric tons of $CO_2$ over their average 20-year life span.[1] This is equivalent to the use of over 250 million homes' electricity use for one year in the United States.[2]

## Estimated $CO_2$ Reduction from Blades Produced over Entire Product Life by Year Produced
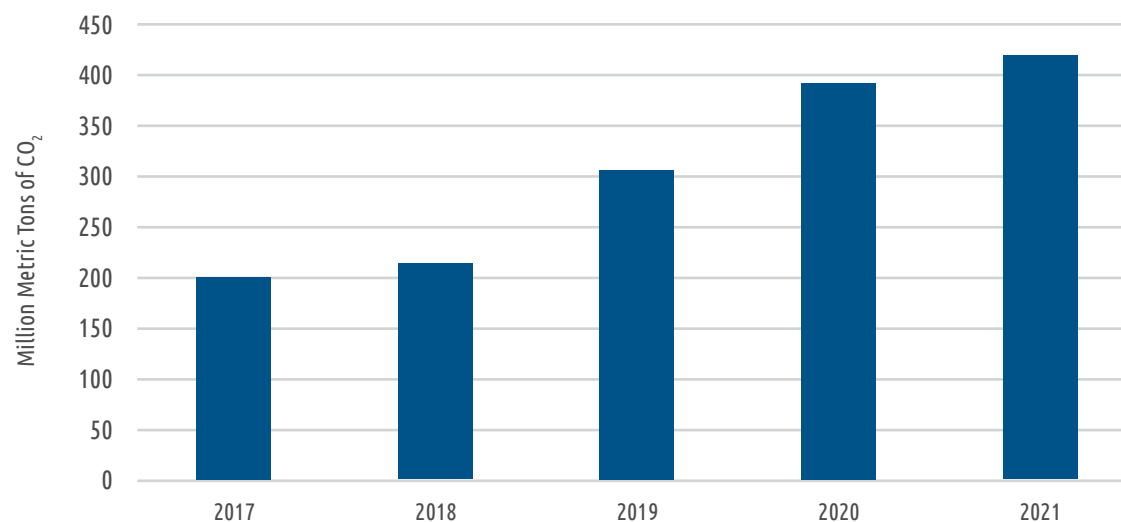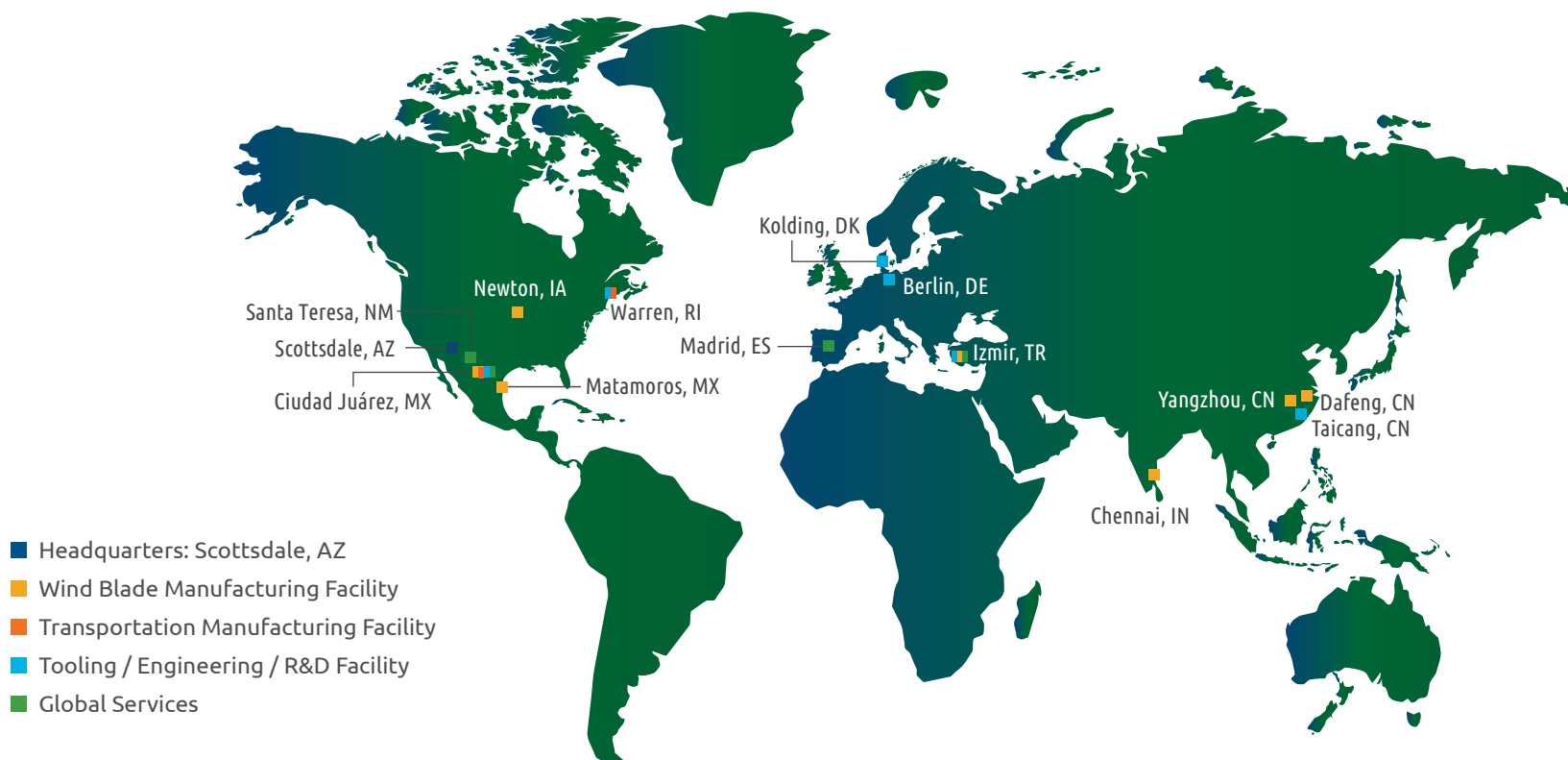


## Sustainable Development Goals

To create a shared pathway for a sustainable world, the United Nations adopted the 17 Sustainable Development Goals (SDGs). The SDGs provide specific targets intended for both governments and businesses to track their progress and address a range of topics such as decent work and economic growth, affordable and clean energy, and climate action. Our alignment to the SDGs is highlighted to the right and throughout this report.



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[1] TPI Produced Estimated MWs x 1000 x Total Lifetime Hours x Estimated Turbine Capacity Factor (DOE/IRENA) x IEA emissions factor of 475 g $CO_2$/kWh
[2] Environmental Protection Agency (EPA). (2021). *GHG Equivalencies Calculator*

*We have 14 manufacturing facilities with over 6 million square feet in 5 countries.*



Kolding, DK
Berlin, DE
Newton, IA
Santa Teresa, NM
Warren, RI
Scottsdale, AZ
Madrid, ES
Izmir, TR
Ciudad Juárez, MX
Matamoros, MX
Yangzhou, CN
Dafeng, CN
Taicang, CN
Chennai, IN

- ■ Headquarters: Scottsdale, AZ
- ■ Wind Blade Manufacturing Facility
- ■ Transportation Manufacturing Facility
- ■ Tooling / Engineering / R&D Facility
- ■ Global Services

## 2.1 | Markets

### Wind

In the International Energy Agency's roadmap to zero emissions in the global energy sector, wind energy is expected to be the single largest generator of electricity by 2050, making up 35% of total generation and with over 8,000 gigawatts installed compared to approximately 740 gigawatts in 2020. This more than 10 times increase in installations is a significant opportunity for the wind industry and TPI.[3]

We expect the long-term trend for wind energy to strengthen based on the low cost of wind energy and strengthening of political will around the world to positively impact climate change. In the U.S., wind projects that started construction in 2021 have until the end of 2025 to be commissioned to qualify for the Production Tax Credit with discussions to extend this further as part of a broader based climate policy agenda that would provide additional industry investment and support if passed; utilities are planning for expanded wind

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[3] International Energy Agency

penetration due to the unsubsidized cost competitiveness; commercial and industrial demand is growing; and states are adding renewable portfolio targets. In Europe, the the target of the European Green Deal is to reduce emissions 55% by 2030 compared to 1990 levels. The European Union is accelerating its efforts further through the REPowerEU program for more affordable, secure, and sustainable energy. China committed to reach carbon neutrality by 2060, and India committed to increase its renewable energy capacity to 500 GW by 2030 and carbon neutrality by 2070.

The levelized cost of wind energy has dropped 72% since 2009.[4] The key drivers that continue to reduce the cost of wind power are longer wind blades, taller towers, increased megawatt ratings, higher capacity factors, lower cost of operations and maintenance, and siting advancements. Almost all onshore wind blades are expected to be between 80 meters to 100 meters by the end of this decade.[5]

We are a key supplier to our customers in the manufacture of wind blades and related precision molding and assembly systems. We dedicate capacity in our global world-class facilities for our customers through supply agreements and a dedicated supplier model. This collaborative dedicated supplier model provides us with contracted volumes that generate significant revenue visibility, drive capital efficiency, and allow us to produce wind blades at a competitive total delivered cost.

[4] Lazard
[5] Wood Mackenzie

## Transportation

The transportation industry is rapidly transitioning to electrification to reduce the impact of vehicle emissions on the environment. This transition is creating opportunities for new entrants, established OEMs, and unique purpose-built products. TPI's transportation business unit is helping enable this transition through the development and delivery of lightweight, durable, and improved performance composite solutions.

With policy support, technology advancements, and increased consumer demand, the market for electric vehicles is anticipated to grow rapidly. For example, electric bus sales are projected to grow almost threefold in the U.S. from 2021 to 2025. The global sales of commercial electric vehicles are also expected to grow into the million plus volume annually by 2025, and passenger electric vehicles are set to grow from 3.1 million in 2020 to 14 million in 2025.[6]

We are collaborating with our customers to develop innovative composite solutions for vehicles across the passenger car, bus, truck, and delivery vehicle market segments. Our composite solutions are ideally suited for transportation applications based on their weight reduction, corrosion resistance, strength, and durability at a lower total program cost and quicker time to market than the alternative metallic solutions. In addition, we are continuing to invest in engineering and capital equipment to drive innovations in the manufacturing processes and expanding automotive industry applications.

*Decarbonize & Electrify*

## 2.2 | Stakeholders

We engage with our stakeholders that most impact, or are most impacted by, our business operations. This includes our Board of Directors (Board), associates, customers, investors, asset managers, ESG raters, industry associations, and regulators.

### Engagement Approach

We regularly engage our stakeholders through a variety of methods, such as posting information on our website, publishing quarterly and annual financial reports, and conducting targeted stakeholder outreach to receive feedback and help us identify our material ESG topics. For example, we had dedicated ESG meetings with several large institutional investors around their ESG priorities and the evolving ESG landscape. Each stakeholder group's input helped to shape our priority topics, which are addressed in the respective sections of this report.

| Stakeholder Group | Method of Engagement | Priority Topics |
|---|---|---|
| Associates and Board of Directors | Ongoing Dialogue<br>Engagement Surveys<br>Focus Groups<br>Town Halls | Occupational Health and Safety<br>Governance and Ethics<br>Diversity, Equity, and Inclusion<br>Environmental Compliance<br>Local Communities<br>Anti-Corruption<br>Enterprise Risk Management<br>Human Rights and Supplier Due Diligence |
| Customers | Ongoing Dialogue<br>Contractual Requirements<br>Customer Surveys<br>Interviews | Occupational Health and Safety<br>Energy Management and Emissions<br>Materials and Waste<br>End of Product Life Recycling<br>Diversity and Equal Opportunity |
| Investors / Asset Managers | Ongoing Dialogue<br>Financial Reporting<br>Investor Events<br>Interviews<br>Quarterly Earnings Calls | Occupational Health and Safety<br>Governance and Ethics<br>Energy Management and Emissions<br>Economic Performance<br>End of Product Life Recycling |
| ESG Raters | Research<br>Rating Process/Feedback | Governance and Ethics<br>Economic Performance<br>Diversity, Equity and Inclusion<br>Indirect Economic Impacts<br>Emissions<br>Labor Management |
| Industry Associations | Research | Occupational Health and Safety<br>Economic Performance<br>Governance and Ethics<br>Procurement Practices/ Materials Sourcing<br>Environmental Compliance |
| Regulators | Research | Occupational Health and Safety<br>Training and Education<br>Environmental Compliance<br>Effluents and Waste<br>Governance and Ethics |

## 3 | Material Topics and ESG Goals

We actively seek ongoing feedback regarding our material topics from our internal and external stakeholders. We conducted an in-depth materiality refresh in 2020 to revisit the topics that are most important to our Company and our stakeholders. We completed interviews and surveys with our key internal and external stakeholders, which included our Board, associates, customers, and investors, as well as reviewed information from third-party ESG analysts, industry associations and regulators. Our materiality refresh identified the following material topics in the table below.

| TIER 1 | TIER 2 | TIER 3 | ESG Goals |
|---|---|---|---|
| **Governance/Core Business/ Economic** | **Governance/Core Business/ Economic** | **Governance/Core Business/ Economic** | *We have the following long-term ESG goals:* |
| • Governance and Ethics<br>• Economic Performance | • Anti-Corruption<br>• Enterprise Risk Management | • Procurement Practices/ Material Sourcing<br>• Indirect Economic Impacts | • *Promote a zero-harm culture focused on eliminating unsafe behaviors* |
| **Environmental** | **Environmental** | | • *Achieve 33% women and 33% racial and ethnically diverse persons on our Board of Directors by 2023* |
| • Emissions | • Environmental Compliance<br>• End of Product Life Recycling<br>• Energy Management<br>• Materials and Waste | **Social** | • *Achieve 25% women on our Global Leadership Team by 2025* |
| **Social** | | • Human Rights and Supplier Due Diligence | • *Achieve 25% racial and ethnically diverse persons on our U.S. Leadership Team by 2025* |
| • Occupational Health and Safety<br>• Diversity, Equity, and Inclusion<br>• Labor Management | **Social** | | • *Become carbon neutral by 2030 with 100% of our energy being procured from renewable sources* |
| | • Training and Education<br>• Local Communities | | |

All topics identified in this table are materially important to internal and/or external stakeholders and are prioritized accordingly.

# Performance
## *Decarbonize & Electrify*

## 4  |  Governance and Ethics

Integrity is one of our Core Values and it guides our associates while conducting the Company's business and performing our daily activities. TPI operates in multiple regions around the world with different cultural and business norms, yet we follow the highest ethical standards.[7]

### Code of Conduct and Anti-Corruption

Our Code of Business Conduct & Ethics (Code) sets the tone regarding ethical behavior. The Code covers conflicts of interest, confidentiality, preventing workplace harassment, human rights, and anti-corruption, among others. TPI's Board, in conjunction with its Audit Committee, is responsible for administering the Code, and has delegated day-to-day responsibility for applying and interpreting the Code to TPI's Office of the General Counsel. The Code and our separate Foreign Corrupt Practices Act and Policy (FCPA Policy) inform associates on anti-corruption practices and expressly prohibits direct and indirect payments that violate applicable anti-corruption laws. All TPI associates receive annual training on both the Code and the FCPA Policy in their local language.

Respect for human rights is also embedded throughout the culture at TPI. Human Rights protections are included within the Code, our supplier code of conduct, and our human rights policy. Our Human Rights Policy highlights TPI's explicit respect for internationally recognized human rights as established in the Universal Declaration on Human Rights and the International Labour Organization's Core Conventions. This includes our commitment to prohibiting forced and child labor, and to promoting workplace safety, freedom of association and collective bargaining, and diversity, equity, and inclusion. We also expect our associates and suppliers to abide by this policy to ensure respect for human rights in all our business dealings.



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[7] Committee of Sponsoring Organizations (COSO): Internal Control – Integrated Framework (2013), https://www.coso.org/Pages/ic.aspx

## Board and Executive Oversight

TPI's Board represents our most senior governance body for the Company. Twelve members sit on the Board, of which 25% are female and 25% are ethnically diverse. It is our goal to achieve 33% female and ethnically diverse board members by 2023. Members of the Board comprise three committees: the Audit Committee oversees fraud prevention and compliance, the Compensation Committee oversees director and executive compensation, and the Nominating and Governance Committee (NGC) oversees ESG, diversity, equity and inclusion (DE&I), and Board composition. Oversight for our strategies and activities related to ESG matters falls under the responsibilities of the NGC, alongside the leadership team.

To help align our compensation and ESG strategies, we have developed ESG targets, which are included in our executive compensation plans. These ESG targets include safety enhancement, DE&I, and waste reduction goals. Each site has developed and implemented action plans, which are measured and reviewed, along with other key operational and financial metrics, by our senior leadership team during our monthly operations meetings with each of our manufacturing locations. We are proud to state we have achieved our 2021 safety enhancement and waste reduction goals.

### Gender Diversity

**25%**
Female

### Ethnic Diversity

**25%**
Ethnically Diverse
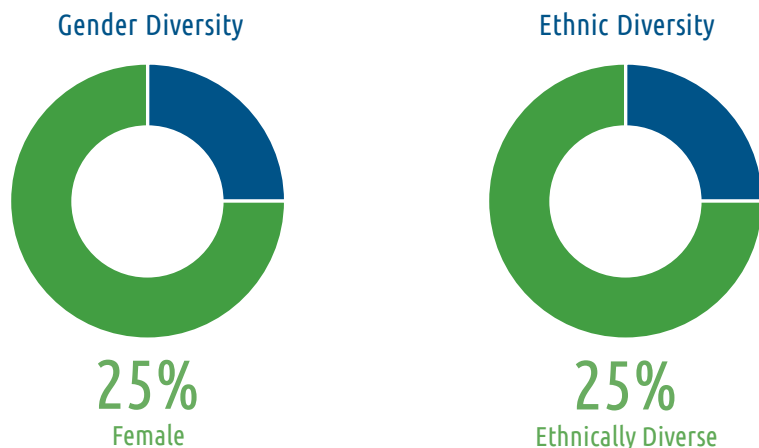
## Enterprise Risk Management

TPI has developed and implemented an Enterprise Risk Management (ERM) framework to identify and evaluate risks that may threaten the achievement of our strategic business objectives. Many of these risks are quantifiable and controllable, but others are complex and difficult to predict (e.g., geopolitical uncertainty, pandemics). Many of our strategic business objectives are centered around traditional business goals such as revenue and profitability but given the nature of our Company in the renewable energy sector, it is imperative we continue to lead and set the ESG "Gold Standard."

We have prioritized our top enterprise risks and developed comprehensive action plans to help mitigate potential impact to our organization. The status of our action plans is reviewed quarterly by our senior leadership team and is reviewed, at least annually, by our Board.

## External Certifications

We have implemented management systems at each of our manufacturing facilities according to the international standards for quality, environment, and health and safety, ISO 9001, ISO 14001, and ISO 45001, respectively. We perform internal audits and have annual third-party surveillance audits performed to maintain our certifications as well as ensure regulatory compliance.

As of the date of this report, we have eleven facilities ISO 9001 certified, nine facilities ISO 14001 certified, and eight facilities ISO 45001 certified. With the addition of a facility in Mexico during 2021, we have revised our ISO certification deployment plan and expect to have all manufacturing sites certified by the end of 2023. Furthermore, one of our facilities in Turkey is actively pursuing ISO 50001 certification, and our Rhode Island facility has obtained its IATF 16949 letter of conformance. Our certifications are found on our website.[8]

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8 https://www.tpicomposites.com/resources/ehs-quality-certificates/

*One of our Juarez, Mexico plants achieved the Clean Industry Certification in 2021. The facility voluntarily participated in an environmental audit and received certification from the Mexico Federal Attorney's Office for Environmental Protection (PROFEPA).*

We require our top global raw material suppliers to maintain a Quality Management System (QMS), Quality Assurance (QA), or Product Quality plan compliant with ISO 9001, in accordance with industry standards, and TPI's customers' requirements. To ensure compliance, we audit our largest global raw material suppliers to ensure consistency and standardization throughout the value chain.

### Ethics Reporting

Associates are encouraged to report all concerns either directly or anonymously, through multiple reporting tools including the Ethics Hotline, which is operated by an independent third-party provider. Associates receive ongoing training and communication about how to report concerns, each TPI location displays posters in the local language on ethics reporting, and the Company's intranet prominently displays reporting tools for associates. Any reports submitted to the Ethics Hotline are only accessible by the Office of the General Counsel and Audit Committee Chairperson in order to protect the reporter's identity. All reports regarding a procedural, ethical, or policy concern are taken seriously and investigated promptly by the human resources department, the internal audit department, the internal legal department or an external law firm, depending on the nature of the concern. TPI has a strict policy prohibiting retaliation against any associate that reports concerns.

# 5 | Health and Safety

At TPI, safety is our number one Core Value. We strongly believe that all accidents are preventable and that every associate should return at the end of their shift to their families in the same healthy condition in which they showed up for work. To do so, we continue to implement and improve our global behavior-based safety program to eliminate unsafe behaviors.

Our 14 manufacturing facilities have safety management systems in place that cover their associates and activities. We currently have eight facilities ISO 45001 certified. We expect to have the remaining facilities certified as well by end of 2023. We aim to align safety practices across our global facilities and to have them all meet the higher of U.S. Occupational Safety and Health Administration (OSHA) health and safety standards or local laws and regulations. Facilities where local standards are less stringent than the OSHA minimums generally adhere to the more rigorous U.S. standards.

We ensure the safety of our associates to support our zero-harm culture in a variety of ways, starting with safety education. Safety education is the foundation for our other safety measures. Associates receive regular training on environmental, health and safety (EHS) related topics. This training includes but is not limited to:

- general awareness EHS training
- ergonomics training
- compliance training
- hazard-specific training as required for the job or task
- fire hazard and prevention training
- hazardous material training
- equipment-specific safety training
- safety incident and corrective action training

To ensure that safety behaviors are properly executed, multiple measures are implemented at each site by our leadership teams and health and safety professionals. These measures include:

- good-catch safety program
- safety committees
- weekly safety walks
- daily safety communication

A good-catch is the identification of a condition or behavior that has the potential to cause harm with timely intervention and corrective action before an incident occurs. In 2021, the number of good-catches submitted was more than 30,000 demonstrating an active commitment by our associates in preventing unsafe conditions and behaviors.

Each manufacturing facility has its own safety committee where associates participate in the improvement of their facility's safety management, and meetings are typically held monthly. Committee responsibilities include the review of safety incidents, identification of safety hazards, follow-up on safety improvement action plans and more.

During the safety walks, members of the site leadership team walk the factory and observe operations to identify unsafe conditions and unsafe behaviors. During these walks, the leadership team engages with associates to verify their EHS knowledge and coaches them on observed behaviors.

Safety communication materials are provided to associates and discussed with leadership daily. Topics include recent safety hazards, issues, and training. Furthermore, associates can remove themselves from any situation they view to be hazardous to their health without fear of retaliation. Corrective action to perceived hazards would be taken as appropriate by TPI.

## COVID-19 Pandemic Response Plan

*We continued to follow our plan in 2021 with measures focused on prevention, protection, and the promotion of public health. These measures were put in place to provide a safe operating environment for our associates to continue operating at all our facilities. We facilitated Company-led vaccination drives for our associates. Additionally, we provided on-going education and reinforcement of safe behaviors such as proper wearing of PPE, hand hygiene, cleaning and sanitizing of facilities, social distancing for our associates, and provided PPE for the families of our associates.*

safe tpi

A standard global behavior-based safety process was implemented in 2021 to ensure we provide coaching around at-risk behaviors and reinforce safe behaviors.

While we employ various preventative safety measures across our operations, we understand that accidents may happen and have processes in place to investigate and prevent future injuries. If an incident occurs, a root cause is identified, and corrective actions are implemented to address the hazard that led to the incident. All safety information is tracked and reviewed at each facility and with the leadership team. Incidents and corrective actions are then shared across facilities, along with significant good-catches, to ensure that best practices are implemented globally.

We exceeded our safety goals for recordable incident rate (RIR) and lost time incident rate (LTIR). The RIR and LTIR goals were to remain flat or decrease year over year. In 2021, we reduced our RIR by 38% to 0.23 compared to 0.37 in 2020, and we reduced our LTIR by 32% in 2021 to 0.13 compared to 0.19 in 2020. Our 2020 and 2021 RIR and LTIR were significantly below the U.S. Bureau of Labor Statistics industry rates.

### Recordable and Lost Time Incident Rates[9]

Cases per 200,000 Hours Worked

| | TPI RIR | TPI LTIR |
| Industry-BLS RIR | | Industry-BLS LTIR |

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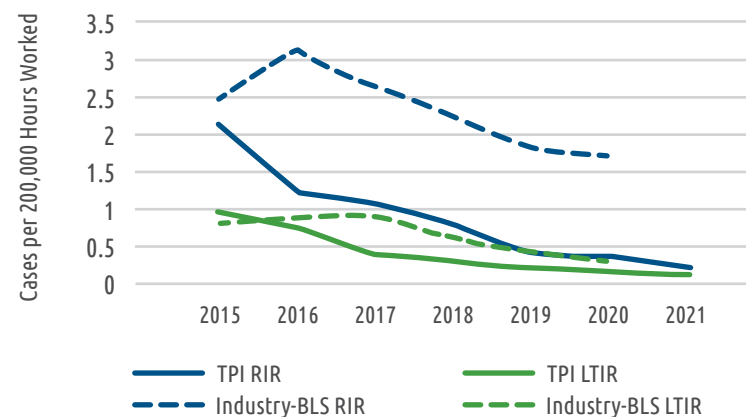
9  Industry incident rates are according to the U.S. Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses NAICS code 333611

# 6 | Supply Chain

Suppliers are a critical part of the extended TPI team and work with us every day to meet and exceed the needs of our customers. We count on our suppliers to meet the same high standards for safety, quality, delivery, and cost that we place on ourselves. In addition to upholding TPI's expectations as communicated in our policies and procedures, we are actively engaging with our suppliers to develop a world-class supplier sustainability program described below.

2021 challenged all organizations globally to effectively manage their supply chains due to a variety of well-known factors such as COVID-19 lockdowns, pent-up demand, raw material cost increases, increased shipping costs, and cargo wait times. To help minimize potential supply chain risks, TPI works closely with our suppliers to implement action plans such as qualification of secondary and tertiary suppliers, localization of the supply base, and pre-orders raw material and/or feed stocks as necessary.

To help maximize supplier quality and cost-savings, we leverage our dedicated supplier model for our customers worldwide. We implement and integrate our rigorous procurement and quality management systems to maximize customer satisfaction and minimize quality issues.

Our dedicated supplier model reflects the demands of our customers. Contracts with our suppliers provide guaranteed capacity and cost-effective material solutions that enable customer participation in quality management while protecting the confidentiality of proprietary product designs. Our global supply chain parallels that of our manufacturing facilities – optimizing labor and logistics costs with proximity to market – to ensure the most competitive cost structure possible. We have the resources and expertise to place supply exactly where our customers need it.



By planning and implementing quality measures up front with our suppliers we reduce risk, minimize occurrences of non-conforming material, and improve the timely launch of new products. We cascade Advanced Product Quality Planning (APQP) standard and APQP for Wind (APQP4Wind) throughout our supply base. These are structured methods of defining and implementing the steps necessary to mitigate risk, achieve the desired product quality and performance, and meet our customer's requirements. APQP has been the backbone for maturing performance at manufacturers and suppliers for decades in the automotive industry with APQP4Wind being a variant of the standard for the wind industry. TPI mitigates risk across the supply chain by establishing clear product quality assurance demands, leading a robust material approval process, and documenting compliance and conformance at each step.

We purchase materials, products, and services to support production across our global manufacturing facilities. The largest category within our global procurement spend is direct raw materials. The majority of raw materials for the products we manufacture include advanced fiberglass fabrics, select carbon reinforcements, core materials such as balsa wood and foam, epoxy resins and adhesives for assembly of molded components, gel coat or paint for preparation of cosmetic surfaces, lightning protection systems, and attachment hardware, including steel components. Our raw material supply chain encompasses over 550 suppliers in more than 30 countries, with a supply spend of approximately 63% of our net sales in 2021, and we continue to enhance our use of local and regional suppliers to ensure a continuous and uninterrupted supply of materials to support our facilities and reduce transportation distance and carbon emissions. During 2021, we audited more than 30 suppliers which accounted for approximately 54% of our annual supply spend. We audited these suppliers on a range of topics important to TPI such as EHS, quality, process control, ESG, and DE&I.

### Supplier Sustainability Program

One of our top priorities is to strengthen our ESG opportunities throughout our supply chain. To help achieve our ESG goals, we have established a supply chain sustainability program to require and inspire our suppliers to engage with us around sustainability priorities while increasing transparency, consisting of three pillars:

1. Develop a clear understanding of sustainability objectives and progress

2. Strengthen and accelerate supplier engagement and sustainability performance

3. Embed sustainability learning and criteria across our supply chain procedures and processes

We have set goals with our top suppliers across key ESG topic areas, including safety, carbon neutrality, waste management, and DE&I.

We continue to further integrate ESG criteria into our supplier selection and management processes. During the supplier sourcing process, we evaluate prospective suppliers' compliance with ESG criteria and incorporate them into our commercial contracts. For example, we consider independent certifications for social and environmental standards, such as Forest Stewardship Council (FSC) certifications for balsa wood.

### Human Rights and Supplier Due Diligence

We have implemented policies and procedures to help us evaluate the integrity of our third-party business partners. These policies – which address areas such as child labor, corruption, safety, and sustainability – are incorporated into all TPI purchasing documents and are available on our website. We have documented standards for suppliers and monitor performance throughout the supplier lifecycle. We do this by using an independent vendor assessment tool, conducting audits of our suppliers, and including TPI's expectations for compliance and ethical behavior in our Supplier Code of Conduct and Human Rights Policy.

TPI also implemented a continuous supplier monitoring system which looks for changes in governmental sanctions lists and other outlets. As part of a proactive approach, suppliers are reviewed weekly, and findings are addressed as quickly as possible to ensure that suppliers meet TPI's expectations.

### Regional Raw Material Supply Chain Spend



Total
## $1.1 Billion USD

- China | 22%
- Europe | 28%
- U.S. | 25%
- Turkey | 14%
- Mexico | 2%
- India | 3%
- Other | 6%
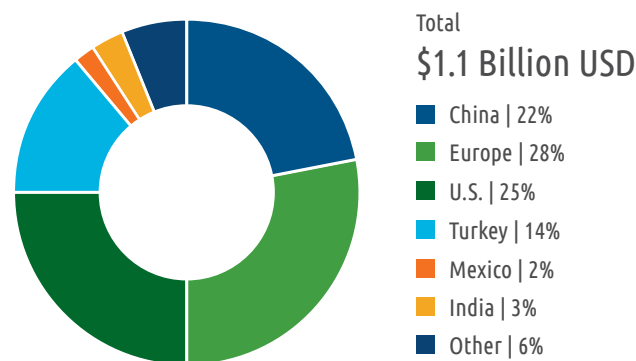
## 7 | Research and Development

As a leader of composite product manufacturing, we conduct extensive research and development (R&D) in close collaboration with our customers, industry consortia, academic partnerships and U.S. National Laboratories on the design, development, and deployment of innovative manufacturing processes, including automation, innovative material application, and sophisticated product quality inspection tools. Our R&D efforts place high priority on driving quality through continuous process improvement, while reducing costs across our manufacturing facilities, and expanding our supply chain through cross-qualifying materials and development of both global and local suppliers. We have a broad set of R&D activities including new material technologies, new molding technologies, tooling and assembly operations and our industry-leading activities in model-based manufacturing. Additionally, we participate on collaborative programs as a working member of the Institute for Advanced Composite Manufacturing Innovation (IACMI). This effort includes new material systems focused on creating an economical solution to end-of-life reclamation of materials for reuse and recycling and the development of new process technologies.

The increase of wind power installations is a result of the continuous improvement in turbine capacity factor, which directly impacts the levelized cost of energy (LCOE) from wind. This, in turn, is a result of innovative wind blade designs leading to longer wind blades that capture more power. However, the industry is likely approaching a transportation limit which requires further innovation such as two-piece wind blades that are assembled at the wind turbine site. TPI is currently manufacturing these wind blades through new mold and wind blade design programs that will ensure that we are best able to meet our customers' requirements and reduce LCOE.

The level of new electric vehicle model announcements by both established and new-entry OEMs is driving the need to advance manufacturing efficiency. Several of the designs that we have recently developed show a significant mass saving over traditional metallic bodies, which translates directly to fewer batteries or increased range. We are also implementing industry leading compression molding processes that optimize material usage, reduce in-process scrap and high-cost, manual labor, and enable high-volume production. At a complete vehicle body level, we have developed semi-automated fixture driven assembly systems. The result of changing to these manufacturing processes makes composites a more attractive solution to the OEMs.

### Blade Recycling



| End of blade life | Dismantle, cut, transport to recycling site | Break down the pieces to a processable size | Pieces crushed/ ground/separated to required sizes | Define methods to have the material usable for the required process | Recycled end-product |
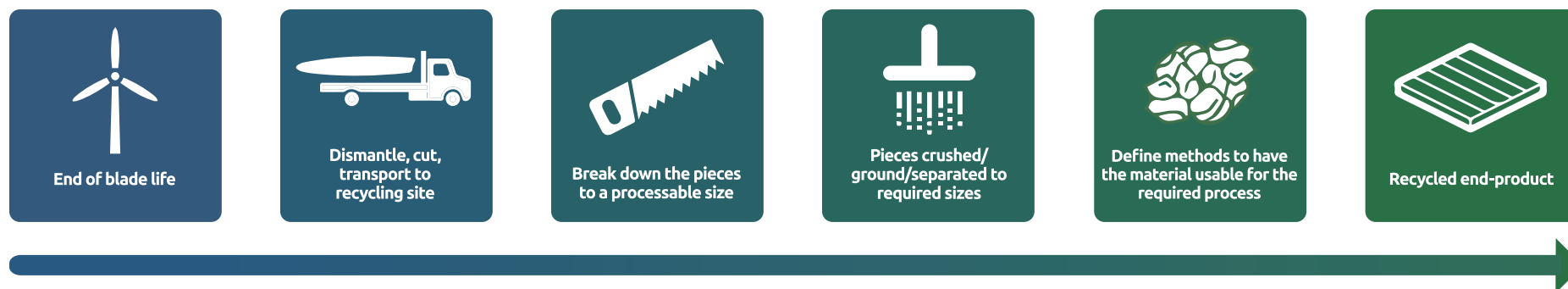
## 8 | Associates

TPI's highly engaged and diverse workforce is a key strategic advantage. Our associates are committed to the Company, their teams, and their communities. It is through our associates' efforts that we continue to achieve high levels of performance.

Our manufacturing process is more manual than most people may realize, and the products we manufacture are large and often weigh more than 16 metric tons on average. In addition, the manufacturing process requires a highly collaborative team-based approach. When we select new associates to join TPI, we ensure that the individuals have high levels of learning agility and adaptability in addition to the skills needed for the role. Our associates embrace our Core Values – Safety, Operational Excellence, Commitment, Integrity, and Leadership – and bring these values to life by applying their diverse backgrounds and skillsets to everyday actions, demonstrating high discretionary effort, and embracing our Values in Motion program.

*In 2021 we continued to expand our Values in Motion program. This program provides a common framework for understanding our Core Values. The program showcases associates who exemplify and role model our values.*

**Values IN MOTION**

SAFETY | OPERATIONAL EXCELLENCE | COMMITMENT | INTEGRITY | LEADERSHIP

TPI cultivates an environment of high engagement where our associates feel included, have a sense of belonging, and can achieve high levels of performance. During this past year, we conducted a global engagement survey where we received a 95% response rate from our associates and more than 100,000 comments. Our overall results were in the top 25% of manufacturing companies and above the global benchmark. This demonstrates that our leadership team considers associate engagement a top priority and that our action plans are positively impacting our associates. Our engagement strategies directly help reduce associate turnover rates in each country which are at or below their respective geographic averages.

Our regional human resources teams and external partners help ensure we maintain compliance with all current labor standards and strong relationships with our labor unions. At all levels of leadership, we have provided training to foster positive labor relations and develop action plans to address changes as needed.

TPI provides a total rewards program that is competitive to the market in all our locations. Our organization's base compensation is established by benchmarking the position to the market median utilizing salary surveys from qualified data sources that provide local, regional, and national data on salaries earned in similar positions to TPI. Regarding additional benefits, all associates are covered either through social programs or TPI in alignment with the market. Additionally, several of our locations provide medical services through on-site doctors, food services through cafeterias, and transportation services to the facilities.

We also provide regular performance feedback throughout the year for our associates, in addition to managing our annual formal performance review process.

The passion, commitment, and resilience of our associates is critical in helping us achieve our vision to lead the energy transition through advanced technology and innovative solutions.

### Total Turnover[10]
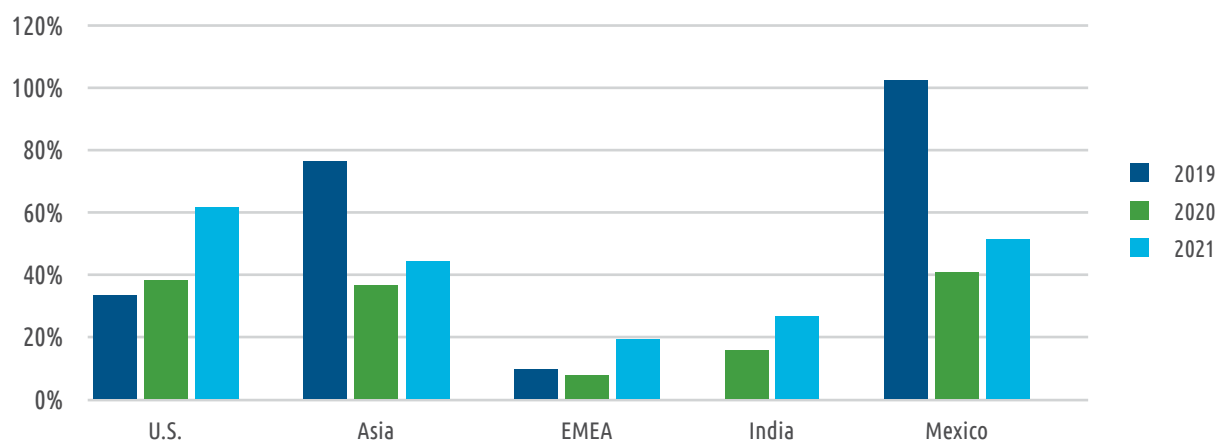
*Everyone has a voice.*

*We want to listen to yours.*

## 8.1 | Diversity, Equity, and Inclusion

As a global business, we have an incredible opportunity to benefit from the diversity we have in our Company. We value diversity in all forms, especially diversity of thought, and we aspire to create an environment that recognizes and celebrates the benefits that come with a diverse workforce. We know that diversity of our associate population makes us better, and we strive to continue to improve and act with intention in these areas. We continue to promote diversity, equity, and inclusion at TPI.

We define these key terms as follows:

- **Diversity** is all the ways in which people differ, encompassing the different characteristics that make one individual or group different from another.

- **Equity** focuses on the fair treatment, such as any group of individuals' access, opportunities for advancement, and feeling like they are growing in the organization.

- **Inclusion** is the act of creating environments in which any individual or group can be and feel welcomed, listened to, and valued to fully participate.

We continue to communicate and celebrate our vision for DE&I:

**Everyone has a voice. We want to listen to yours.**

We can and will do more to maximize the positive impact that DE&I, and a feeling of belonging can bring to TPI. We believe that this and the rest of our vision statement is a solid representation of what we believe in, are committed to, and how we will hold our leaders and associates accountable.

As we continue our DE&I journey, we will use language that is intentional and reflects our own thinking. We recognize that one of our greatest areas of opportunity is to increase the representation of women at all levels of leadership, as well as overall racial and ethnic diversity as we continue to add more talent to our leadership teams.

We have goals to increase both our overall representation of women in our global leadership team and our overall racial and ethnic diversity of our U.S. leadership team to 25% by 2025. Our global and U.S. leadership, generally, includes leaders at the director level and above.

To strengthen our DE&I efforts, TPI established a global DE&I Council and champion network to help guide, monitor progress, and hold us accountable for promoting our vision to create an inclusive culture. The primary role of the DE&I Council is to connect DE&I initiatives to strategic business goals and outcomes. In addition, the DE&I Council focuses on cultural change efforts, promoting transparency, driving accountability, and encouraging Company-wide communications on progress.

Additionally, all TPI managers receive formal in-person training on inclusive leadership, which focuses on understanding DE&I, and how to integrate these concepts into our daily actions and culture. Furthermore, every leader subscribes to an online learning channel, where bi-weekly micro-learnings are delivered on DE&I topics. In 2021, we had nearly 1,000 independent course completions using this platform, which is accessible in all languages and includes articles, videos, and other learning materials.

*In 2021, our DE&I programs moved from strategy to action. We remain focused on creating an inclusive culture where every associate has a strong sense of belonging, has a voice, and feels they can grow with TPI.* —Deane Ilukowicz, Chief People Officer

**Gender Diversity | Global Leadership Team**

- Male | 83%
- Female | 17%
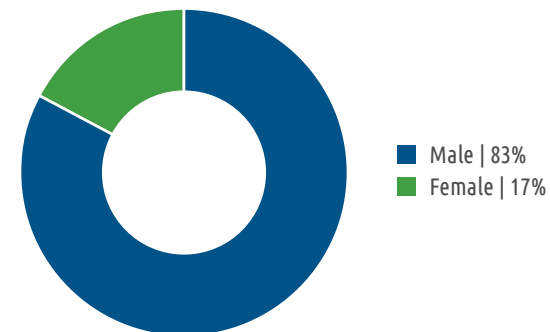
**Racial/Ethnic Diversity | Global Leadership Team**

- Caucasian | 51%
- Latino | 12%
- Middle Eastern | 14%
- Black | 2%
- Asian | 21%
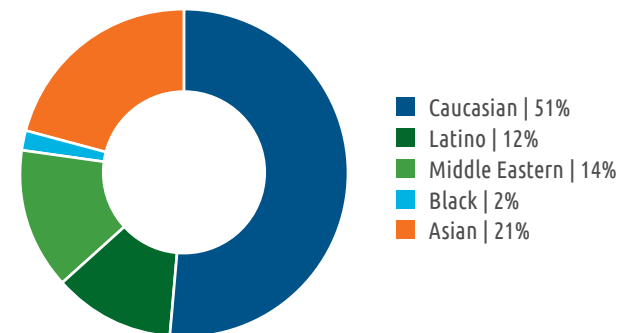
**Racial/Ethnic Diversity | U.S. Leadership Team**

- Caucasian | 80%
- Latino | 6%
- Middle Eastern | 4%
- Black | 4%
- Asian | 6%
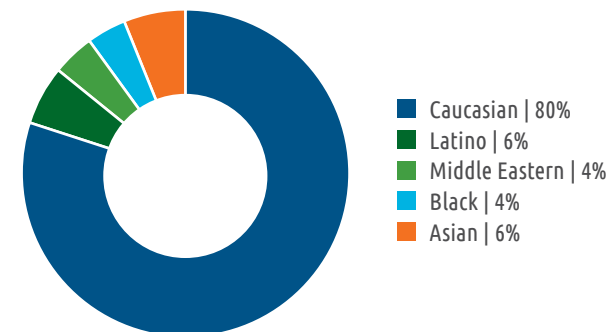
## 2021 Diversity, Equity, and Inclusion Initiatives

### CEO Action for Diversity and Inclusion Business Commitment

Our CEO, Bill Siwek, signed the CEO Pledge for Action. TPI is now part of a global community and has access to best practices from companies around the world to support our journey to create an inclusive environment where all associates have a sense of belonging. The pledge has four main goals:

1. To continue to make our workplaces trusting places to have complex, and sometimes difficult, conversations about diversity and inclusion.

2. To implement and expand unconscious bias education.

3. To share best – and unsuccessful – practices.

4. To create and share strategic inclusion and diversity plans with our Board.

TPI shared our own best practices with this community, conducting disparate impact analysis on equitable pay and assessing cultural awareness of DE&I, provided Creating an Inclusive Culture training to leaders at all levels globally, conducted a DE&I Survey, discussed our DE&I strategy and results with the Board, and hosted our first Global Day of Understanding.

### Global Day of Understanding

During the Global Day of Understanding, our CEO and Chief People Officer hosted global focus groups and spoke with more than 100 associates from around the world. Our senior leaders spoke with an additional 450 associates in similarly structured conversations.

*DE&I is an important part of our DNA, and it is through these types of exchanges that we can learn about what is working well and where we have opportunities to improve. —Bill Siwek, President and CEO*

## 2021 Diversity, Equity, and Inclusion Initiatives

**tpi leap** FOR WOMEN

We launched our first global Associate Resource Group (ARG) – LEAP for Women. LEAP stands for lead, empower, advance and promote. Globally all of our operations established LEAP for Women chapters co-chaired by representatives from the business and human resource teams.

All associates have a voice, and in 2021, we facilitated our second DE&I survey to understand our associates' beliefs and perceptions about their experiences at TPI. The survey results provided comparative measures to the 2020 survey that as a leadership team we can seek to understand and improve upon. The survey focused on diversity, and feelings of belonging, inclusivity, and being equitably treated. Globally 93% of our associates participated in this survey. Our DE&I overall score was 76% favorable, which is an impressive 6% increase over the 2020 results, and we have opportunities to improve. DE&I drivers increased by 5% overall. We saw impressive improvements in two areas specifically – associates feeling listened to and valued, and gender gap convergence in several DE&I categories. We believe these increases were a direct result of robust action planning and execution at the regional levels, and executive support for our DE&I initiatives.



We have an immense opportunity to learn from many different backgrounds and cultures. Each facility developed an action plan and will be held accountable for their results. Regionally, bonus eligible associates have a weighted goal for DE&I in their annual bonus plan. DE&I is embraced at all levels of the organization; it is about all of us making a commitment to seek to understand the thoughts, feelings, and beliefs of others and be respectful of them even if they differ from our own.

Our entire leadership team is committed to listen, learn, and work together to take meaningful action for lasting change at TPI.

## 8.2 | Associate Training and Development

It is through a strong commitment to associate development that we are creating a learning culture. TPI offers training to ensure that our associates are not only well-prepared to perform in the role they are hired into, but also invested in further skills development to provide opportunities for growth. Training and development opportunities are offered on a regular basis and include, but are not limited to, new associate orientation, functional onboarding, safety and compliance training, technical learning, and leadership development.

Training data is reported monthly by each manufacturing facility and functional area. Relevant operational indicators are discussed during this period as they reflect the effectiveness of our associate training. TPI provided more than 490,000 hours of training, an average of 32 hours per associate, in 2021.

Leadership development at TPI combines formal learning, individual assessment and development planning, and mentoring. Formal learning is provided at each facility and includes cornerstone skill development such as coaching, situational leadership, and emotional intelligence. In addition, TPI uses competency-based leadership assessments for creating personalized individual development plans. Finally, we have a formal mentorship program where we pair developing leaders with seasoned leaders to allow for a rich and beneficial development experience.

### Training Hours per Associate by Category



Y-axis: Training Hours per Associate (0 to 60)

| Category | 2019 | 2020 | 2021 |
|---|---|---|---|
| Direct Labor | 48 | 34 | 35 |
| Indirect Labor | 29 | 23 | 26 |
| Administration | 44 | 23 | 18 |

Legend: ■ 2019  ■ 2020  ■ 2021
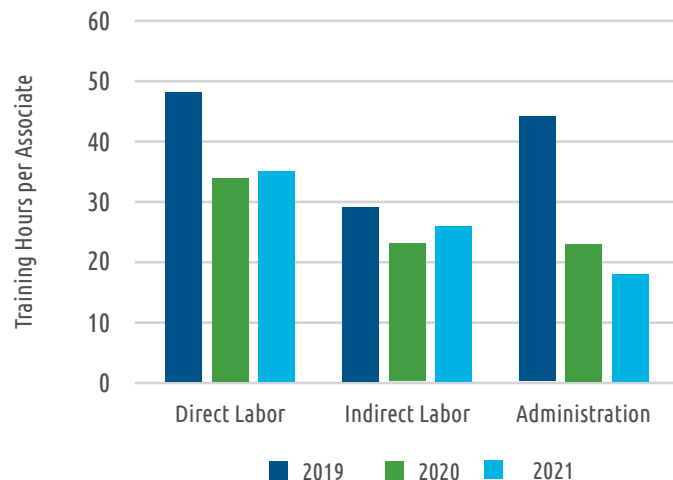
### Training Hours per Associate by Gender



Y-axis: Training Hours per Associate (0 to 50)

| Gender | 2019 | 2020 | 2021 |
|---|---|---|---|
| Female | 33 | 20 | 36 |
| Male | 44 | 33 | 32 |

Legend: ■ 2019  ■ 2020  ■ 2021
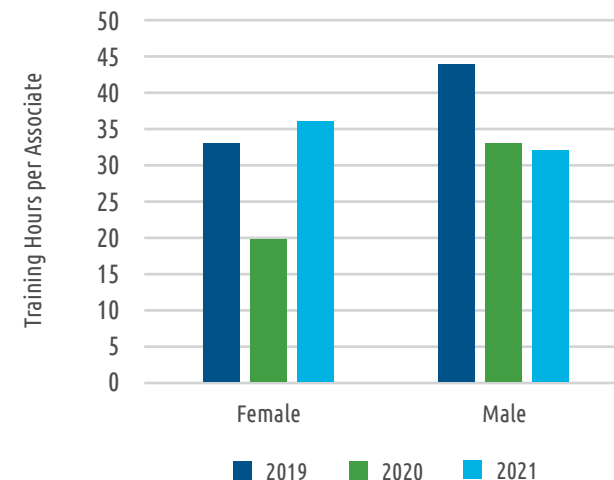
We continue to highlight the expansion of TPI Academy as a critical platform for developing our technical talent. It continues to focus on one of our most critical talent segments, engineering, and has since expanded to incorporate multiple disciplines within TPI such as quality and operations. The goal for our technical engineers and technicians is to use TPI Academy to expand their knowledge of composite technology by learning from our most senior technical talent. Offering an accelerated learning path is helping us to lower costs, improve quality and overall operational excellence. These benefits are critical to the long-term success of TPI and provide a unique competitive advantage with respect to our technical competency.

As we look ahead to our 2022 roadmap, we are adding additional advanced course modules to the curricula, as well as creating and delivering content through diverse modalities to address multiple learning styles. Course metrics are being collected that look beyond course reaction and learning to actual behavioral change and ultimately results. Finally, we are going to focus on our instructors, helping them to expand their current teaching skills. Our goal is to have a culture of learning underpin everything that comes out of TPI Academy.

## 9 | Communities and Economic Impacts

TPI provided significant indirect benefits to our communities through monetary community investments and tens of thousands of associates' volunteer hours.

To guide our community engagement activities, we continue to follow our Company policies and procedures. All engagement events must align with TPI's Core Values, benefit the community (either citizens or environment), and occur outside of scheduled work hours unless preapproved. Given the diversity in our locations, we adapt our engagement activities to the needs of these communities and values of our associates.

Associates take part in activities organized by TPI on their own time, allowing them to give back in ways that are most important to them and align with TPI's Core Values. Our associates completed over 14,000 community engagement hours globally, and we intend to increase our community engagement as we hope COVID restrictions ease within our communities.

### Community Impact Highlights

We remain proud of our associates globally and have highlighted the types of activities that were completed this year on pages 33 and 34. Of note we are especially proud of our associates who knew that their jobs would be impacted sometime in 2021 and how they continued to give back to the communities where they lived and worked.
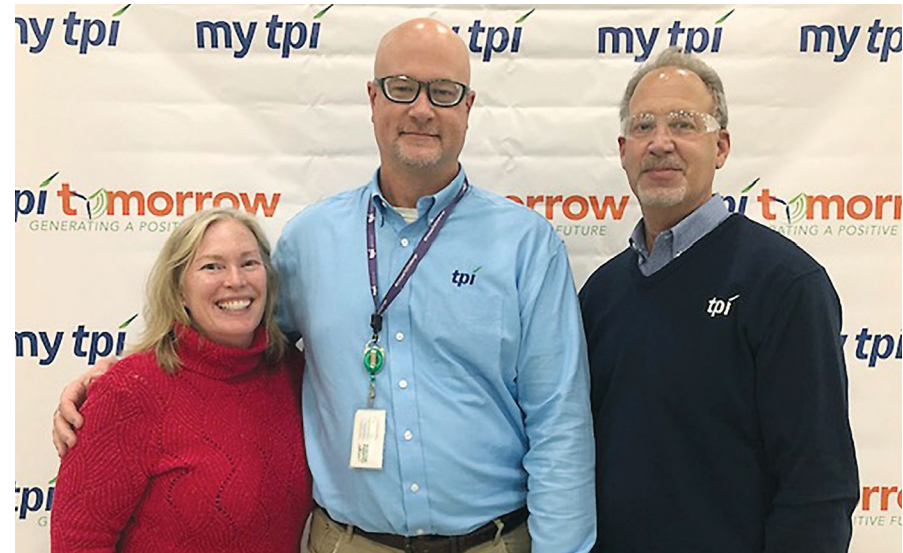


Bill Siwek, CEO and Deane Ilukowicz, Chief People Officer, visited our Iowa facility in December to thank our associates for their continued focus on the customer, their co-workers, and the Newton community.

*TPI has provided significant indirect benefits to our communities through monetary community investments and tens of thousands of volunteer hours provided by our associates.*

**Helping those in need:** Our associates value their neighbors and community members. They provide benefits to their community members through activities that support the elderly, children, those less fortunate and those with disabilities.

**Pandemic Response:** TPI associates continue to be educated on the importance of COVID vaccinations and COVID-19 safety protocols in all facilities. This year, associates complied with global facility requirements to keep their peers, families, and communities safe.



### 2021 Children's Day

Local community children gathered to showcase their talents painting wind blades in China.



### Food Donations

Associates in India donated food to a local nursing home.



### Vaccinations

Associates in Mexico participate in a vaccination event with military personnel where 1,308 associates and community members were vaccinated.

**Giving Back:** TPI associates enjoy giving back to their communities through donations. This year, our associates held several events where items were collected and distributed to local communities.



### Toy Drive

Associates in Arizona participate in the Forgotten Angels Toy Drive to provide gifts to children during the holidays.



### Food Collection

Associates in our TPI Turkey facility collect food to feed homeless animals in the community.

**Community improvements:** Our associates are proud of their communities and actively work to improve them. These improvements include activities such as school restoration projects, clean up after natural disasters and planting trees.



### Sprucing Up

Associates from our Iowa facility spent time beautifying downtown Newton to show their pride.



### World Clean Up Day

Mexico associates participating in World Clean Up Day!

## 10 | Environment

The energy sector accounts for over two-thirds of global GHG emissions and includes transportation, electricity and heat, buildings, manufacturing and construction, fugitive emissions, and other fuel combustion.[11] It is our vision to lead the energy transition through advanced technology and innovative solutions. In doing so, TPI directly impacts climate change by advancing the decarbonization of the electric sector and supporting electrification of the vehicle fleet.

Our EHS policy helps guide all TPI activities to maximize the positive impact that we have on the environment through both the products we manufacture and how we manufacture them. We are committed to protecting our associates, stakeholders, community, and the environment through operating sustainably in compliance with all applicable regulations and standards. We aim to do this by integrating EHS into our business planning and decision making, using our resources more efficiently, empowering our associates with responsibility through training and education, monitoring and managing our EHS performance in alignment with relevant ISO standards, and more.

All our manufacturing facilities have an Environmental Management System (EMS) in place. We have third parties perform annual surveillance audits, and we have nine facilities ISO 14001 certified. We aim to have the remaining facilities certified by the end of 2023.



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[11]  https://www.wri.org/insights/4-charts-explain-greenhouse-gas-emissions-countries-and-sectors

## 10.1 | Materials and Waste

### Recycling of Retired Materials

Product recyclability continues to be a challenge to the composite industry due to the nature of these materials. We are actively working toward sustainable end-of-life solutions for composite products and identifying alternative pathways to landfill through the development of new materials and process technologies that enable greater recyclability through both in-house research and with external partners.

TPI offers decommissioning services to wind blade owners. We are working to develop equipment to provide cost-effective methods to reduce the transport cost of decommissioned wind blades. This work is done in collaboration with waste management companies, government funded activities, university research and consortia that include Europe's Horizon 2020, the U.S. DOE sponsored Institute for Advanced Composite Manufacturing Innovation, and the National Science Foundation WindSTAR I/UCRC. We also conduct independent R&D focusing on a variety of technologies that support a sustainable circular economy.

Research efforts include the identification of industries and applications that will benefit from use of the output created from end-of-life process technologies as feedstocks for new products. One example explores harvesting thermal energy from wind blade resin core materials for firing cement kilns and using

the soda ash generated from glass fibers to displace significant amounts of mined products for the manufacturing of the cement materials. This approach may avoid millions of metric tons of $CO_2$ emissions generated in conventional kiln operations and provides a viable alternative to landfill disposal for end-of-life wind blades. These efforts bring true value and enable a sustainable circular economy for the products we manufacture and the materials that we use as well as offering the entire wind industry services for wind blade decommissioning and disposition.

Longer term solutions include significant efforts in the characterization of new liquid resin systems along with process development and component demonstration of these innovative plastics. These materials have been shown by TPI and others to create composite materials that perform as well as, or better than, current thermosetting epoxies, but provide a low energy pathway to depolymerization. This will allow for recovery of reinforcements (glass fiber, carbon, and core) with minimal impact on their properties and provide feedstocks for new resin and molding compounds thus creating a truly circular economy and providing a bright future for retired composite products.

### Waste

Mitigating and managing waste generated from production is a key objective for TPI. Our sites manage the waste generated according to local regulations. Our waste data is collected monthly using invoices collected from disposal facilities and haulers. All waste data is verified by on-site EHS supervisors and through annual audits conducted at our ISO14001 certified facilities. These processes allow TPI to understand the volume and cost of waste produced to ensure waste reduction remains a priority. We formed waste continuous improvement teams at each location, which worked to complete waste stream analysis and develop waste reduction projects. Many waste reduction projects were completed in 2021 that reduced the process waste sent to landfills through recycling, energy recovery (or waste-to-energy) incineration,

*Waste reduction is a strategic focus area for us. In 2021, we benchmarked waste metrics across our facilities, developed and implemented targeted waste reduction programs, and reduced our production waste rate by more than 5% during the year. We have an aggressive reduction program to significantly reduce our waste in the future.* —Ramesh Gopalakrishnan, President and Chief Operating Officer, Wind

### Waste by Disposal Type
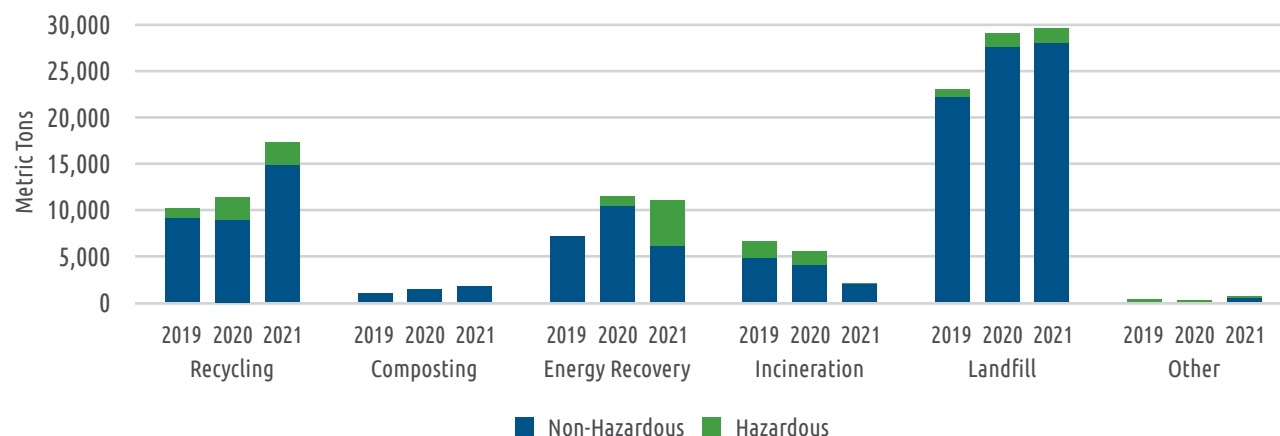


or reuse. Energy recovery is a preferred method of waste management over treatment and disposal as it provides a source of energy generation and reduces carbon emissions due to the reduction of fossil fuel reliance.[12]

We met our process waste rate reduction goal (5% reduction during the year) in 2021. The process waste that we focused on was a subset of our waste that is created as a byproduct of our manufacturing process such as excess material usage and consumable materials. The rate is defined as process waste divided by the total product weight. In 2021, we had 62,152 metric tons of waste, of which 9,298 metric tons was hazardous and 52,854 metric tons was non-hazardous waste. Hazardous waste increased year over year primarily due to the India facility being fully operational in 2021. Landfilled hazardous waste is disposed of through controlled confinement in a landfill that is lined, monitored, and in compliance with government regulations.

### Materials

Raw material is the key cost driver of the products we manufacture. We are committed to doing our part in managing our material usage and waste production. We aim to use our materials as efficiently as we can while still meeting the expectations and requirements of our customers. Since the wind blades we build are based on our customers' designs, the materials used to build them are generally determined by our customers. We currently track the materials used in our manufacturing processes through our product lifecycle management system and enterprise resource planning system. Two percent of our materials used in 2021 were from renewable resources, balsa wood, and one percent were from recycled sources, polyethylene terephthalate (PET).

[12] EPA. (2020). "Energy Recovery from the Combustion of Municipal Solid Waste (MSW)"

## 10.2 | Energy and Emissions

It is our goal to become carbon neutral by 2030 for scope 1 and 2 emissions, with 100% of our electricity coming from renewable sources. We have photovoltaic solar systems installed at several of our locations and are identifying opportunities to reduce our scope 1 emissions by replacing fossil fueled equipment with electric alternatives and our scope 2 emissions by using renewable energy resources. In addition, we are focused on reducing the energy usage. We hired a third party to perform energy audits at 11 facilities to evaluate building performance and identify opportunities to reduce energy and water usage.

Our scope 1 emissions are those that we produce on site through fuel combustion and refrigerant usage. Scope 2 emissions are those that we indirectly produce through the direct purchase of electricity and power. Scope 3 emissions encompass a broader scope of indirect sources, such as purchased goods and services and upstream transportation and distribution.

In 2021, our total energy usage was 888,010 gigajoules (GJ). Our total scope 1 and 2 emissions were 95,836 metric tons $CO_2$e. Total emissions decreased this year primarily because our facility in India received electricity from the grid instead of diesel generators that were used during the facility's start-up. We reduced our emissions intensity by approximately 9% year over year due to manufacturing more and longer wind blades. Our scope 3 emissions in 2021 were approximately 1,661,000 metric tons $CO_2$e.

### Emissions
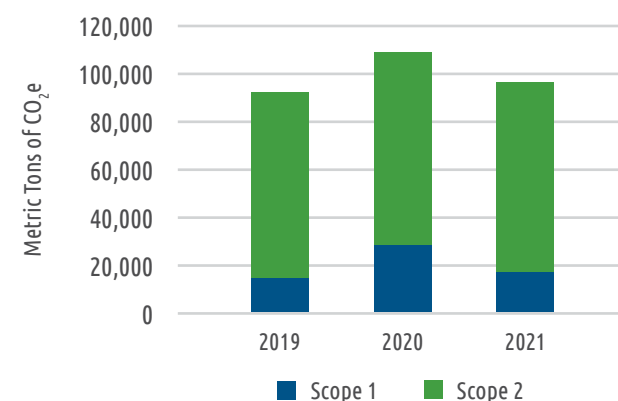


### $CO_2$e Intensity
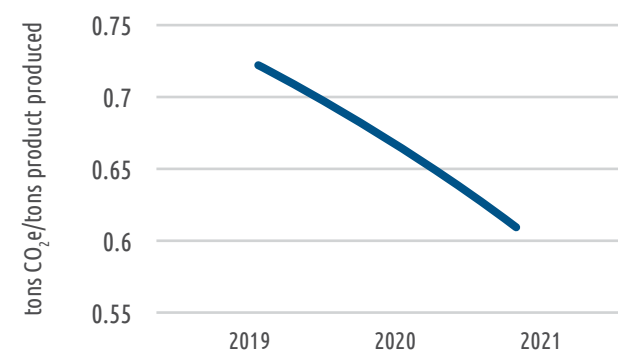
## 10.3 | Environmental Compliance

At TPI, we are fundamentally committed to help safeguard our planet for future generations. Given our global footprint, we operate in locations with varying environmental laws and regulations with the potential to impact our communities. We aim to align practices across our global facilities and to have them all meet the higher of U.S. environmental laws, regulations, and standards or local equivalents. Facilities that have local laws and regulations less stringent than the U.S. minimum generally adhere to the more stringent U.S. standards. All TPI facilities have an environmental impact assessment performed prior to starting operations of the facility, which includes an evaluation of the land prior to the start of construction. Compliance with environmental laws and regulations are reviewed monthly to mitigate regulatory risk associated with incomplete or inaccurate tracking of reporting requirements.

Each facility documents applicable environmental regulation as well as compliance requirements for retention of necessary environmental permits and reporting to government agencies. Any updates, changes or removals of regulatory requirements are also documented. All environmental inspections and instances of non-compliance with environmental laws and regulations are communicated to the leadership team.

In 2021, we had zero instances of significant noncompliance.

*We are fundamentally committed to help safeguard our planet for future generations.*

## 11 | 2021 Performance

### Safety

Incident rates use a standardized base rate to calculate the number of incidents per 100 associates. Injury frequency rates calculate the number of injuries per year for each 1 million hours worked. Recordable incidents are based on OSHA reporting requirements and exclude first-aid injuries. Please refer to the formulas below to see how these rates are calculated:

$$\text{Incident Rate (IR)} = \frac{\text{Number of Incidents X 200,000}}{\text{Number of Associate Labor Hours}}$$

$$\text{Injury Frequency Rate (IFR)} = \frac{\text{Number of Injuries X 1,000,000}}{\text{Number of Associate Labor Hours}}$$

| | Recordable Injuries | | | Lost Time Injuries | | | High Consequence Injuries | | | Fatal Injuries | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 |
| Number | 53 | 58 | 38 | 28 | 30 | 22 | 1 | 5 | 2 | 0 | 0 | 0 |
| Incident Rate | 0.39 | 0.37 | 0.23 | 0.21 | 0.19 | 0.13 | 0.01 | 0.03 | 0.01 | 0 | 0 | 0 |
| Injury Frequency Rate | 1.96 | 1.82 | 1.14 | 1.04 | 0.95 | 0.66 | 0.04 | 0.16 | 0.06 | 0 | 0 | 0 |

| 2021 Contractor Safety Data | | | |
|---|---|---|---|
| | Recordable Injuries | Lost Time Injuries | Fatal Injuries |
| Number | 1 | 1 | 0 |
| Incident Rate | 0.09 | 0.09 | 0 |
| Injury Frequency Rate | 0.47 | 0.47 | 0 |

## Environment

| Type of Material | Weight (metric tons) | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| Renewable | 4,000 | 5,800 | 4,500 |
| Non-Renewable | 124,500 | 149,300 | 201,500 |
| Recycled | N/A | 3,700 | 2,300 |
| Non-Recycled | N/A | 151,400 | 203,700 |
| Total | 128,500 | 155,100 | 206,000 |

| Energy Type | Amount (GJ) | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| Natural gas | 200,991 | 163,241 | 155,368 |
| Fuel | 25,006 | 214,940 | 101,956 |
| Total direct energy consumed | 225,997 | 378,181 | 257,324 |
| Total indirect energy consumed – electricity and steam | 545,483 | 599,531 | 630,686 |
| Total energy consumed | 771,480 | 977,712 | 888,010 |

| Emissions | | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| Scope 1 | 16,003 | 25,137 | 18,392 |
| Scope 2 Location Based | 75,252 | 78,855 | 77,444 |
| Scope 2 Market Based | N/A | 98,035 | 92,667 |
| Total Scope 1 and 2 Emissions Location Based | 91,258 | 103,992 | 95,836 |
| Total Scope 1 and 2 Emissions Market Based | N/A | 123,171 | 111,059 |
| Total Scope 3 Emissions | N/A | N/A | 1,661,000 |
| $CO_2$e Intensity (tons $CO_2$e/tons product produced) Location Based | 0.72 | 0.67 | 0.61 |
| Estimated $CO_2$ reduction from wind blades produced over entire product life | 307,000,000 | 392,000,000 | 422,000,000 |
| Biogenic Emissions | N/A | N/A | 1 |

| Waste Type | | Non-Hazardous (metric tons) | | | Hazardous (metric tons) | | | Total (metric tons) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Year | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 |
| **Waste diverted from disposal** | Recycling | 8,992 | 8,828 | 14,780 | 1,089 | 2,442 | 2,450 | 10,081 | 11,270 | 17,230 |
| | Composting | 1,114 | 1,546 | 1,642 | 0 | 0 | 0 | 1,114 | 1,546 | 1,642 |
| **Waste directed to disposal** | Energy recovery | 7,111 | 10,436 | 6,132 | 0 | 1,081 | 4,950 | 7,111 | 11,517 | 11,082 |
| | Landfill | 22,183 | 27,594 | 27,945 | 823 | 1,420 | 1,563 | 23,006 | 29,014 | 29,508 |
| | Incineration | 4,746 | 3,913 | 1,986 | 1,738 | 1,509 | 58 | 6,484 | 5,422 | 2,044 |
| | Other | 11 | 0 | 369 | 399 | 339 | 277 | 410 | 339 | 646 |
| **Waste generated** | **Total** | **44,156** | **52,317** | **52,854** | **4,049** | **6,791** | **9,298** | **48,206** | **59,108** | **62,152** |

| Environmental Compliance | Amount | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| Number of significant non-compliance violations | 0 | 0 | 0 |
| Significant fines | $0 USD | $0 USD | $0 USD |

| Estimated Water Withdrawal (Megaliters) | | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| Total Water Withdrawal (third party) | 374 | 422 | 374 |

## People

| Location | Number of Associates | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| U.S. | 1,352 | 1,308 | 606 |
| Asia | 2,885 | 1,982 | 1,388 |
| EMEA | 3,259 | 4,089 | 4,184 |
| India | 353 | 1,589 | 1,644 |
| Mexico | 5,497 | 5,996 | 6,316 |
| Total | 13,346 | 14,964 | 14,138 |
| Male | 12,045 | 13,683 | 12,408 |
| Female | 1,301 | 1,281 | 1,730 |

| Associate Category | Number of Associates | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| Direct Labor | 9,777 | 10,944 | 10,208 |
| Indirect Labor | 3,056 | 3,298 | 3,354 |
| Administrative | 513 | 722 | 576 |
| Total | 13,346 | 14,964 | 14,138 |
| Global Leadership Team* | 77 | 104 | 109 |

For the following charts, 2020 data can be found in the ESG data tables on our website.

| 2021 New Hires by Age # and % | | | | | | | |
|---|---|---|---|---|---|---|---|
| Under 30 | | 30-50 | | Above 50 | | Total | |
| U.S. | 140 | 36% | 195 | 50% | 58 | 15% | 393 | 100% |
| Asia | 18 | 25% | 53 | 75% | 0 | 0% | 71 | 100% |
| EMEA | 490 | 61% | 310 | 39% | 2 | 0% | 802 | 100% |
| India | 485 | 84% | 90 | 16% | 1 | 0% | 576 | 100% |
| Mexico | 2,191 | 48% | 2,256 | 49% | 128 | 3% | 4,575 | 100% |
| Total | 3,324 | 52% | 2,904 | 45% | 189 | 3% | 6,417 | 100% |

* Global Leadership Team totals are included within the overall associate categories.

| 2021 New Hires by Gender # and % | | | | | | |
|---|---|---|---|---|---|---|
| | Female | | Male | | Total | |
| U.S. | 97 | 25% | 296 | 75% | 393 | 100% |
| Asia | 7 | 10% | 64 | 90% | 71 | 100% |
| EMEA | 116 | 14% | 686 | 86% | 802 | 100% |
| India | 99 | 17% | 477 | 83% | 576 | 100% |
| Mexico | 1,408 | 31% | 3,167 | 69% | 4,575 | 100% |
| **Total** | **1,727** | **27%** | **4,690** | **73%** | **6,417** | **100%** |

| 2021 Turnover by Age # and %* | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Under 30 | | 30-50 | | Above 50 | | Total | |
| U.S. | 162 | 93% | 347 | 129% | 97 | 39% | 606 | 62% |
| Asia | 159 | 44% | 583 | 45% | 21 | 79% | 763 | 45% |
| EMEA | 375 | 23% | 456 | 19% | 8 | 35% | 839 | 20% |
| India | 351 | 31% | 78 | 17% | 4 | 80% | 433 | 27% |
| Mexico | 1,553 | 61% | 1,506 | 48% | 93 | 23% | 3,152 | 52% |
| **Total** | **2,600** | **44%** | **2,970** | **39%** | **223** | **31%** | **5,793** | **40%** |

| 2021 Turnover by Gender # and %* | | | | | | |
|---|---|---|---|---|---|---|
| | Female | | Male | | Total | |
| U.S. | 185 | 77% | 421 | 60% | 606 | 62% |
| Asia | 70 | 29% | 693 | 48% | 763 | 45% |
| EMEA | 35 | 21% | 804 | 20% | 839 | 20% |
| India | 30 | 40% | 403 | 26% | 433 | 27% |
| Mexico | 591 | 76% | 2,561 | 48% | 3,152 | 52% |
| **Total** | **911** | **61%** | **4,882** | **38%** | **5,793** | **40%** |

| 2021 Associate Category by Age % | | | | |
|---|---|---|---|---|
| | Under 30 | 30-50 | Above 50 | Total |
| Direct Labor | 45% | 51% | 4% | 100% |
| Indirect Labor | 32% | 63% | 5% | 100% |
| Administrative | 15% | 70% | 15% | 100% |
| **Total** | **41%** | **55%** | **5%** | **100%** |
| Global Leadership Team | 1% | 57% | 42% | 100% |

* Note: Turnover data exclude turnover due to reductions in force from site closures and COVID-19 related reasons.

| 2021 Age % | | | |
|---|---|---|---|
| | Under 30 | 30-50 | Above 50 | Total |
| Board of Directors | 0% | 17% | 83% | 100% |

| 2021 Associate Category by Gender % | | | |
|---|---|---|---|
| | Female | Male | Total |
| Direct Labor | 10% | 90% | 100% |
| Indirect Labor | 13% | 87% | 100% |
| Administrative | 43% | 57% | 100% |
| **Total** | **12%** | **88%** | **100%** |
| Global Leadership Team | 17% | 83% | 100% |

| 2021 Gender % | | | |
|---|---|---|---|
| | Female | Male | Total |
| Board of Directors | 25% | 75% | 100% |

| 2021 Associate Category by Race/Ethnicity % | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Asian | Black | Latino | Middle Eastern | Caucasian | Other | Total |
| Direct Labor | 22% | 1% | 46% | 30% | 1% | 0% | 100% |
| Indirect Labor | 21% | 0% | 47% | 28% | 3% | 0% | 100% |
| Administrative | 26% | 1% | 32% | 15% | 22% | 3% | 100% |
| **Total** | **22%** | **1%** | **46%** | **29%** | **2%** | **0%** | **100%** |
| Global Leadership Team | 21% | 2% | 12% | 14% | 51% | 0% | 100% |
| U.S. Leadership Team | 6% | 4% | 6% | 4% | 80% | 0% | 100% |

| 2021 Race/Ethnicity % | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Asian | Black | Latino | Middle Eastern | Caucasian | Other | Total |
| Board of Directors | 8% | 17% | 0% | 0% | 75% | 0% | 100% |

| Training Hours per Associate by Category and Gender | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Training Hours per Female | | Training Hours per Male | | Training Hours per Direct Labor | | Training Hours per Indirect Labor | | Training Hours per Administrative | | Training Hours per Associate | |
| 2019 | 33 | 2019 | 44 | 2019 | 48 | 2019 | 29 | 2019 | 44 | 2019 | 43 |
| 2020 | 20 | 2020 | 33 | 2020 | 34 | 2020 | 23 | 2020 | 23 | 2020 | 31 |
| 2021 | 36 | 2021 | 32 | 2021 | 35 | 2021 | 26 | 2021 | 18 | 2021 | 32 |

| Community Engagement | Metric | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| Volunteer hours | 23,100 hours | 14,700 hours | 14,900 hours |
| Community investments | $58,000 | $41,000 | $83,000 |
| Facilities with a government approved environmental impact assessment or environmental assessment meeting local standards | 100% | 100% | 100% |
| Facilities with a community engagement program | 100% | 100% | 93%* |

| Indirect Economic Impact | Metric | | |
|---|---|---|---|
| Year | 2019 | 2020 | 2021 |
| Supply spend | $838,500,000 USD | $1,027,000,000 USD | $1,084,000,000 USD |
| China | 33% | 39% | 22% |
| Europe | 28% | 22% | 28% |
| U.S. | 24% | 21% | 25% |
| Turkey | 9% | 10% | 14% |
| Other | 4% | 3% | 6% |
| Mexico | 1% | 4% | 2% |
| India | 1% | 1% | 3% |

* 100% as of March 31, 2022

# *APPENDIX*

## 12 | GRI Content Index

| Disclosure | GRI 102: General Disclosures 2016 | External Reference |
|---|---|---|
| 102-1 | TPI Composites, Inc. | |
| 102-2 | Please refer to page 6. | 10-K |
| 102-3 | 8501 N. Scottsdale Road, Suite 100, Scottsdale, Arizona 85253 | Global Footprint |
| 102-4 | We are currently located in China, Denmark, Germany, India, Mexico, Turkey, and the United States. | Global Footprint |
| 102-5 | Please refer to the Cover Page of our 2021 Form 10-K for information regarding this disclosure. | 10-K |
| 102-6 | TPI is an independent composite manufacturer serving wind turbine and transportation OEMs with operations in the United States, China, India, Mexico, and Turkey. | Global Footprint |
| 102-7 | (see table below) | 10-K |

| Location | Facility Type | Number of Facilities |
|---|---|---|
| Scottsdale, Arizona, U.S. | Headquarters | 1 |
| Warren, Rhode Island, U.S. | Engineering/R&D | 1 |
| Santa Teresa, New Mexico, U.S. | Wind Blade Storage and Global Service Training Center | 1 |
| Newton, Iowa, U.S. | Wind Blade Manufacturing | 1 |
| Taicang, China | Precision Molding Facility | 1 |
| Dafeng, China | Wind Blade Manufacturing | 1 |
| Yangzhou, China | Wind Blade Manufacturing | 1 |
| Kolding, Denmark | Engineering/R&D | 1 |
| Berlin, Germany | Engineering/R&D | 1 |
| Chennai, India | Wind Blade Manufacturing | 1 |
| Juarez, Mexico | Wind Blade Manufacturing | 3 |
| Juarez, Mexico | Precision Molding and Transportation Manufacturing | 1 |
| Matamoros, Mexico | Wind Blade Manufacturing | 2 |
| Madrid, Spain | Global Service Training Center | 1 |
| Izmir, Turkey | Wind Blade Manufacturing Engineering/R&D | 2 |
| **Total** | | **19** |

Across all our facilities we employed approximately 14,100 full-time associates and produced over 9,700 wind blades in 2021. Please refer to our Form 10-K to obtain information on our 2021 financials.

| Disclosure | GRI 102: General Disclosures 2016 | External Reference |
|---|---|---|
| 102-8 | Refer to data tables on page 43. We do not employ a significant number of part-time or temporary associates and therefore they are not broken out by these categories. | Investor Presentation |
| 102-9 | Please refer to pages 21-22 for information on our supply chain. | Suppliers Standard Terms of Purchase Supplier Code of Conduct Quality Requirements 10-K |
| 102-10 | • TPI added a wind blade manufacturing facility on July 1, 2021, in Matamoros, Mexico.<br>• Two customers contracts ended at our Iowa and one of our Juarez, Mexico facilities, which resulted in a decrease in the total number of TPI associates for the year.<br>• We are in the process of consolidating our three operations in China into one facility. | |
| 102-11 | TPI manufactures products generally using designs from our customers. The responsibility for assessing the potential environmental impact of new products is led by TPI's customers. TPI is actively partnering with research organizations, such as the National Renewable Energy Laboratory (NREL), to develop composite solutions to help further reduce potential environmental impacts, such as the recycling of retired materials and using thermoplastics. Please refer to page 35 for more information on our environmental practices. | NREL |
| 102-12 | • TPI has implemented the APQP4Wind quality framework and is partnering with its customers and suppliers to align quality methods and procedures throughout the wind blade manufacturing lifecycle.<br>• CEO Action for Diversity and Inclusion | Certifications APQ4Wind CEO Action for Diversity and Inclusion |
| 102-13 | • American Clean Power Association (ACP)<br>• National Association of Manufacturers (NAM)<br>• Institute for Advanced Composite Manufacturing Innovation (IACMI)<br>• Women of Renewable Industries and Sustainable Energy (WRISE)<br>• ALLY Energy<br>• WindEurope<br>• Turkish Wind Energy Association (TWEA/TÜREB)<br>• WindSTAR University of Massachusetts Lowell<br>• American Council on Renewable Energy (ACORE)<br>• National Association of Corporate Directors (NACD)<br>• Several other region-specific organization memberships | |

| Disclosure | Strategy | External Reference |
|---|---|---|
| 102-14 | Mr. Siwek provides a statement at the beginning of this report, which can be found on page 5. | |
| **Ethics and Integrity** | | |
| 102-16 | Please refer to pages 4 and 15. | Company Overview<br>Code of Conduct |
| 102-17 | Please refer to page 17. | Code of Conduct |
| **Governance** | | |
| 102-18 | Please refer to pages 15-17. | 10-K<br>Management Team<br>Board of Directors<br>Committee Compositions |
| **Stakeholder Engagement** | | |
| 102-40 | Please refer to pages 11-12. | |
| 102-41 | Certain of our associates in Turkey, Matamoros, Mexico and Berlin, Germany are represented by a labor union. 38% of our total associates were covered by a collective labor agreement (CLA) as of December 31, 2021. | |
| 102-42 | Please refer to pages 11-12. | |
| 102-43 | Please refer to pages 11-12. | |
| 102-44 | Please refer to pages 11-12. | |
| **Reporting Practice** | | |
| 102-45 | For information regarding this disclosure please refer to our consolidated financial statements in our Form 10-K filing. | 10-K |

| Disclosure | Reporting Practice |
|---|---|

*Stakeholder Inclusiveness:* Please refer to pages 11-12.

*Sustainability Context:* Our approach to sustainable development focuses not only on the environmental impact of the products we build, but also a commitment to our associates through safety programs and associate development and building strong relationships in the communities in which we operate and provide economic impact.

*Materiality:* Please refer to page 13.

*Completeness:* The information included reflects information deemed important based on our materiality assessment. Information regarding both areas that we are doing well in and areas that we have room for improvement related our sustainability impacts are included in this report. The table below shows what is included within each topic-specific disclosure.

**102-46**

| | | US | | | | Mexico | | | | | | EMEA | | | | Asia | | | India | Global Services |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Disclosure | Topic | AZ | IA | RI | ST | MX1 | MX2 | MX3 | MX4 | MX5 | MX6 | TK1 | TK2 | DK | DE | DF | TC | YZ | IN | GS |
| 201-1 | Economic Performance — Direct economic value generated and distributed | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 203-2 | Indirect Economic Impacts — Significant indirect economic impacts | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 301-1 | Materials — Materials used by weight or volume | | x | x | | x | x | x | x | x | x | x | x | | | x | | | x | x |
| 301-2 | Materials — Recycled input materials used | | x | x | | x | x | x | x | x | x | x | x | | | x | | | x | x |
| 302-1 | Energy — Energy consumption within the organization | | x | x | x | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 305-1 | Emissions — Direct (Scope 1) GHG emissions | | x | x | x | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 305-2 | Emissions — Direct (Scope 2) GHG emission | | x | x | x | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 305-3 | Emissions — Other Indirect (Scope 3) emissions | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 305-4 | Emissions — Emissions Intensity | | x | x | x | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 306-1 | Waste — Waste generation and significant waste-related impacts | | x | x | | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 306-2 | Waste — Management of significant waste-related impacts | | x | x | | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 306-3 | Waste — Waste generated | | x | x | | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 306-4 | Waste — Waste diverted from disposal | | x | x | | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 306-5 | Waste — Waste directed to disposal | | x | x | | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 307-1 | Environmental Compliance — Non-Compliance with environmental laws and regulations | | x | x | x | x | x | x | x | x | x | x | x | | | x | x | x | x | |
| 401-1 | Employment — New associate hires and associate turnovers | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 402-1 | Labor Management — Minimum notice periods regarding operational changes | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-1 | Occupational Health and Safety — Occupational health and safety management system | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-2 | Occupational Health and Safety — Hazard identificiation, risk assessment, and incident investigation | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-3 | Occupational Health and Safety — Occupational health services | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-4 | Occupational Health and Safety — Worker participation, consultation, and communication on occupational health and safety | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-5 | Occupational Health and Safety — Worker training on occupational health and safety | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-6 | Occupational Health and Safety — Promotion of worker health | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-7 | Occupational Health and Safety — Prevention and mitigation of occupational health and safety impacts directly linked to business relationships | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 403-9 | Occupational Health and Safety — Work-related injuries | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 404-1 | Training and Education — Average hours of training per year per associate | | x | x | x | x | x | x | x | x | x | x | x | | | x | x | x | x | x |
| 405-1 | Diversity and Equal Opportunity 2015 — Diversity of governance bodies and associates | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 413-2 | Local Communities — Operations with local community engagement, impact assessments, and development programs | x | x | x | x | x | x | x | x | x | | x | x | | | x | x | x | x | |

U.S.: Scottsdale, Arizona (AZ), Newton, Iowa (IA), Warren, Rhode Island (RI), and Santa Teresa, New Mexico (NM)
Mexico: Juarez (MX1-3 and MX5) and Matamoros (MX4 and MX6)
EMEA: Izmir, Turkey (TK1 and TK2), Copenhagen, Denmark (DK), and Berlin, Germany (DE)
Asia: Dafeng, China (DF), Taicang, China (TC), and Yangzhou, China (YZ)
India: Chennai, India (IN)
Global Services are performed in various countries around the world.

| Disclosure | Reporting Practice | External Reference |
|---|---|---|
| 102-47 | Please refer to page 13. | |
| 102-48 | None | |
| 102-49 | We have included Scope 3 emissions. | |
| 102-50 | The reporting period encompasses the 2021 calendar year, unless stated otherwise. | |
| 102-51 | This report was published on March 31, 2022. | |
| 102-52 | Sustainability reporting is expected to occur on an annual basis. | |
| 102-53 | Please contact Investor Relations regarding any questions or feedback: investors@tpicomposites.com or by phone at +1 (480) 315-8742. | Investor Relations |
| 102-54 | This report has been completed in accordance with the GRI Standards: Core Option. | |
| 102-55 | Please refer to pages 48-56. | |
| 102-56 | DNV, an independent, third-party assurance provider, conducted a limited-level assurance on selected performance indicators within this report, including select SASB Standards and GRI indicators. Assurance details can be found in the Independent Assurance Statement on pages 63-66. External assurance has also been provided for our direct economic impacts via the auditing that occurs for our Form 10-K. | |
| **GRI 201: Economic Performance 2016** | | |
| Management Approach | We divide our business operations into four geographic operating segments – the U.S., Asia, EMEA, India, and Mexico. The consolidated financial statements that can be found in our Form 10-K include the accounts of TPI Composites, Inc., and all majority owned subsidiaries. These financial statements are audited by an external party (KPMG LLP). Further information on how we manage our economic performance can be found in our Form 10-K. | 10-K |
| 201-1 Direct economic value generated and distributed | Our consolidated financial statements are audited by an independent third party and are available to view on our website.<br><br>We are proud of our involvement in our communities and want to highlight the direct investments we have made. Please refer to the data table on page 46. | 10-K |

| Disclosure | GRI 301: Materials 2016 | External Reference |
|---|---|---|
| Management Approach | For more information regarding our material management please refer to page 37 of this report. | |
| 301-1 Materials used by weight or volume | Please refer to the data table on page 41.<br><br>To obtain our material usage by renewable and non-renewable resources for our wind blade and transportation production the weight of renewable materials (balsa wood) used and non-renewable materials per wind blade and transporation products were estimated and multiplied by the number of units produced for 2021. | |
| 301-2 Recycled input materials used | Please refer to the data table on page 41.<br><br>To obtain our material usage by recycled and non-recycled input for our wind blade and transportation production the weight of recycled materials (PET) and non-recycled materials used per unit were estimated and multiplied by the number of units produced for 2021. | |

| | GRI 302: Energy 2016 and GRI 305: Emissions 2016 | |
|---|---|---|
| Management Approach | For more information regarding our energy and emissions management please refer to page [32] of this report. | |
| 302-1 Energy consumption within the organization | Please refer to the data tables on page 41.<br><br>The conversion factors used to convert Natural Gas, Diesel, Gasoline, and Electricity into GJ were sourced from the EIA along with their conversion calculators. The conversion factor used for LPG is sourced from EL Gas. | EIA Conversion<br><br>EL Gas |
| 305-1 Direct (Scope 1) GHG emissions<br><br>305-2 Indirect (Scope 2) GHG emissions<br><br>305-3 Other Indirect (Scope 3) emissions<br><br>305-4 GHG Emissions Intensity | Please refer to the data tables on page 41.<br><br>Emissions for Scope 1 and 2 were calculated based on operational control. Gases included are $CO_2$, $CH_4$ and $N_2O$. The Global Warming Potentials (GWPs) are from the IPCC AR6 and emissions factors are from the U.S. EPA and the IEA for our international facilities.<br><br>The categories for Scope 3 emissions included in the calculation are purchased goods and services, direct materials, operations costs, capital goods, fuel, and energy-related activities, upstream and downstream transportation and distribution, waste generated in operations, business travel, employee commuting, upstream and downstream leased assets, processing of sold products, use of sold products, end of life treatment of sold products, franchises, and investments. Gases included are $CO_2$, $CH_4$ and $N_2O$. The GWPs used are from the UK Defra, Idemat, EUCIA Eco Impact Calculator, the IEA, the U.S. EPA, and customer developed emissions factors. | EPA Emissions Factors<br><br>IEA Emissions Factors<br><br>GWPs IPCC AR6<br><br>UK Defra<br><br>Idemat<br><br>EUCIA Eco Impact Calculator |

| Disclosure | GRI 306: Waste 2020 | External Reference |
|---|---|---|
| Management Approach | For more information regarding our waste management please refer to pages 36-37 of this report. | |
| 306-1 Waste generation and significant waste-related impacts | For more information regarding our product inputs and outputs please refer to pages 36-37. | |
| 306-2 Management of significant waste-related impacts | Please refer to the data tables on page 42. For actions on waste prevention and the processes TPI uses to collect and monitor waste data please refer to pages 36-37. Hazardous waste disposal methods are confirmed by hazardous waste manifests. Non-hazardous waste disposal methods are confirmed based on vendor reports. Waste is reported based on shipment dates from our facilities. The other category includes waste disposed from cafeteria grease traps and using the U.S. EPA H141 code that is stored by the waste vendor and the disposal method is not provided to TPI. | |
| 306-3 Waste generated | Please refer to the data tables on page 42. | |
| 306-4 Waste diverted from disposal | Please refer to the data tables on page 42. All waste is transported of offsite. | |
| 306-5 Waste directed to disposal | Please refer to the data tables on page 42. All disposal methods were conducted offsite. | |
| **GRI 307: Environmental Compliance 2016** | | |
| Management Approach | For more information regarding our environmental compliance management please refer to page 39 of this report. | Certifications<br><br>EHS Policy |
| 307-1 Non-compliance with environmental laws and regulations | Monetary Value of Significant Fines: $0<br>Total number of non-monetary sanctions: 0 | |
| **GRI 401: Employment 2016** | | |
| Management Approach | For more information regarding our employment management please refer to page 24 of this report. | |
| 401-1 New associate hires and associate turnovers | Please refer to the data tables on pages 43-44. | |

| Disclosure | GRI 402: Labor Management 2016 | External Reference |
|---|---|---|
| Management Approach | For more information regarding our labor management please refer to page 24 of this report. | |
| 402-1 Minimum notice periods regarding operational changes | At TPI we have a philosophy to communicate what we know, when we know it, in the most thoughtful and engaging way possible. In the event that we have a significant redundancy event in one of our operations we would follow this guiding philosophy. At a minimum, we would strive to provide associates no less than a two-week notice period. | |
| **GRI 403: Occupational Health and Safety 2018** | | |
| Management Approach 403-1 to 403-7 Management Approaches | Work-related hazards are identified via the good-catch, safety walks/audits, and job safety analysis. The hierarchy of controls (elimination, substitution, engineering controls, administrative controls, and PPE) is executed through self-correction and leadership implementation. Audits, inspections, and observations are conducted to ensure risks are being addressed. Access to non-occupational medical and healthcare services varies across our facilities. These include on site clinics, referral to outside medical services and private health insurance. Voluntary health promotions vary between facilities. These include preventative wellness checks, fitness and wellness benefits, healthy eating programs and more. For more information regarding our health and safety management please refer to pages 18-20 of this report. | Certifications EHS Policy |
| 403-9 Work-related injuries | Please refer to the data tables on page 40. We had zero fatalities. Please note this disclosure covers all facilities, including headquarters. Recordable incidents are based on OSHA reporting requirements and exclude first-aid injuries. Types of injuries include lacerations, fractures, strains, contusions, and others. Our safety data covers all TPI associates and embedded contractors. | |
| **GRI 404: Training and Education 2016** | | |
| Management Approach | For more information regarding our training management, please refer to pages 30-31 of this report. | |
| 404-1 Average hours of training per year per associate | Please refer to the data tables on page 46. | |

| Disclosure | GRI 405: Diversity and Equal Opportunity 2016 | External Reference |
|---|---|---|
| Management Approach | For more information regarding our diversity and equal opportunity management please refer to page 26 of this report. | |
| 405-1 Diversity of governance bodies and associates | Please refer to the data tables on pages 44-45. | |
| | **GRI 413: Local Communities 2016 and GRI 203: Indirect Economic Impacts 2016** | |
| Management Approach | For more information regarding our community management, please refer to page 32 of this report. | |
| 413-1 Operations with local community engagement, impact assessments, and development programs | Please refer to the data tables on page 46.<br><br>Further details on our types of community engagement can be found in the *Community Engagement Highlights* section of this report on page 33-34. | |
| 203-2 Significant indirect economic impacts | Please refer to the data tables on page 46. | |

## 13 | SASB Disclosure – Wind Technology & Project Developers and Electrical & Electronic Equipment[13,14]

| Activity Metrics | Category | Unit | Code | Response |
|---|---|---|---|---|
| Number of produced wind blades[15]  Number of units produced by product category | Quantitative | Number | RR-WT-000.A  RT-EE-000.A | Wind Blades: 9,765  Transportation: This information has been deemed confidential. |
| Aggregate capacity of delivered wind blades | Quantitative | Megawatts (MW) | RR-WT-000.B | 12,939 |
| Number of associates | Quantitative | Number | RT-EE-000.B | 14,138 |
| Amount of wind blade contract value[16] | Quantitative | Reporting currency | RR-WT-000.C | $2.2 billion USD to $3.5 billion USD |
| Aggregate capacity of blade contract value | Quantitative | Megawatts (MW) | RR-WT-000.D | This information has been deemed confidential. |

| Topic | Accounting Metric | Category | Unit of Measure | Code | Response |
|---|---|---|---|---|---|
| Energy Management | (1) Total energy consumed (2) percentage grid electricity, (3) percentage renewable | Quantitative | Gigajoules (GJ), Percentage (%) | RT-EE-130a.1 | (1) 888,010 GJ (2) 62% (3) 4% |
| Hazardous Waste Management | (1) Amount of hazardous waste generated, (2) percentage recycled | Quantitative | Metric tons (t), Percentage (%) | RT-EE-150a.1 | (1) 9,298 t (2) 26% |
| | Number and aggregate quantity of reportable spills, quantity recovered | Quantitative | Number, Kilograms (kg) | RT-EE-150a.2 | 0 kg |
| Product Safety | Number of recalls issued, total units recalled | Quantitative | Number | RT-EE-250a.1 | None |
| | Total amount of monetary losses as a result of legal proceedings associated with product safety | Quantitative | Reporting Currency | RT-EE-250a.2 | None |

[13] SASB metrics refer to wind turbine information, however, as the products we manufacture are wind blades we adjusted these metrics to reflect this.

[14] Because TPI manufactures wind blades only and not the complete turbine, not all the industry metrics are applicable. These include: RR-WT-410a.1 Average top head mass, RR-WT-410a.2 backlog cancellation associated with community or ecological impacts, RT-WT-440b.2 Average top head mass per turbine capacity, by wind turbine class, RT-EE-410A.1 Percentage of products by revenue that contain IEC 62474 declarable substances and RT-EE-410a.2 Percentage of products by revenue that meet ENERGY STAR® criteria.

[15] We report on the number of wind blades that we have produced rather than delivered

[16] This value includes contract value of both wind blades and transportation products

| Topic | Accounting Metric | Category | Unit of Measure | Code | Response |
|---|---|---|---|---|---|
| Workforce Health & Safety | (1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct associates and (b) contract associates | Quantitative | Rate | RR-WT-320a.1 | Please refer to 2021 Performance – Safety table on page 40. |
| Product Lifecycle Management | Revenue from renewable energy-related and energy efficiency-related products | Quantitative | Reporting currency | RT-EE-410a.3 | Please refer to our Form 10-K. |
| Ecological Impacts of Project Development | Description of efforts to address ecological and community impacts of wind energy production through wind blade design | Discussion and Analysis | N/A | RR-WT-410a.3 | Please refer to GRI disclosure 102-11. |
| Materials Sourcing | Description of efforts to address ecological and community impacts of wind energy production through wind blade design | Discussion and Analysis | N/A | RR-WT-440a.1  RT-EE-440a.1 | While the use of critical materials presents no direct critical material risk to TPI's operations, TPI takes material disclosure into consideration for sourcing selection to reduce the risk of regulatory exposure arising from TPI's global sourcing activities. As part of our Global Sourcing Process, TPI requires all global material suppliers to disclose any use of conflict minerals used directly or indirectly in their own or any sub-suppliers' process. TPI's due diligence measures are further described in its Conflict Minerals Report filed with the SEC. |

| Topic | Accounting Metric | Category | Unit of Measure | Code | Response |
|---|---|---|---|---|---|
| Materials Efficiency | Top five materials consumed, by weight | Quantitative | Metric tons (tons) | RR-WT-440b.1 | Fiber glass: 81,000 tons<br>Resin: 41,000 tons<br>Carbon reinforcements: 15,000 tons<br>Core: 11,000 tons<br>Adhesive: 6,000 tons |
| | Description of approach to optimize materials efficiency of wind blade design | Discussion and Analysis | N/A | RR-WT-440b.3 | TPI is a build to print manufacturer of onshore wind blades, building cost effective and high-quality wind blades according to our customers' designs. While TPI does not design wind blades or influence the design with consideration of ecological or community impacts for our customers, we do work closely with our customers to implement design changes should such considerations be made. For more information please refer to page 37. |
| Business Ethics | Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behavior | Discussion and Analysis | N/A | RT-EE-510a.1 | Please refer to our Governance and Ethics section of this report on page 15. |
| | Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption | Quantitative | Reporting currency | RT-EE-510a.2 | None |
| | Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior | Quantitative | Reporting currency | RT-EE-510a.3 | None |

## *14 | Task Force on Climate-related Financial Disclosures (TCFD)*

| Disclosure Focus Area | Recommended Disclosure | TPI Response |
|---|---|---|
| Governance | 1a) Describe the boards oversight of climate-related risks and opportunities | The Nomination and Corporate Governance Committee (NGC) is responsible for overseeing and reviewing the Company's ESG strategy and activities. The NGC meets quarterly and:<br><br>• Reviews/approves the company's ESGs goals<br><br>• Monitors the Company's progress toward achieving Committee-approved ESG goals<br><br>• Evaluates strategic climate-related risks and opportunities<br><br>For further information refer to the Governance and Ethics section on page 15 of this report. |
| | Describe management's role in assessing and managing climate-related risks and opportunities | Given our focus on decarbonizing the electric sector and electrifying the vehicle fleet, our business strategy is aligned to positively impact climate change. TPI's leadership team is actively involved in assessing and managing climate-related risks and opportunities on a day-to-day basis. The details of this process are described in the risk management disclosure below. |

| Disclosure Focus Area | Recommended Disclosure | TPI Response |
|---|---|---|
| Strategy | 2a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term. | TPI went through a comprehensive study that assessed climate-related risks and opportunities over the short (0-3 years), medium (4-6 years) and long term (7+ years). Through this process we arrived at risks and opportunities material to our business, with the effects of these beginning in the short-term. TPI views our top climate-related risk to be competition – viewed both as competition within the renewable energy sector, such as solar, and from competing technologies, such as carbon sequestration. Additionally, climate change may cause more severe or frequent weather events at our manufacturing facilities. TPI's top climate-related opportunity lies in the shift from higher to lower carbon products, which would create an increased demand of wind blades. Additionally, TPI has the opportunity to access new markets and diversify our business through growing our transportation segment due to increased demand in electric vehicles. |
| | 2b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning | TPI fully supports the decarbonization of energy production and the electrification of the vehicle fleet by providing significant reductions in green-house gas (GHG) emissions which helps mitigate climate change.<br><br>TPI is actively addressing the previously mentioned risk within our planning and we are well positioned to pursue the climate-related opportunities identified. |
| | Describe the resilience of the organization's strategy, taking into consideration the different climate-related scenarios, including a 2 degree C or lower scenario | TPI considered both a business as usual scenario (IEA Current Policies Scenario) and a 2 degree C scenario (IEA Sustainable Development Scenario) when assessing the resilience of our business strategy. TPI has a robust strategy that is well positioned under either scenario, and our opportunities are significantly accelerated under the 2 degree C scenario. |

| Disclosure Focus Area | Recommended Disclosure | TPI Response |
|---|---|---|
| Risk Management | 3a) Describe the organization's processes for identifying and assessing climate related risks. | TPI's leadership team is responsible for assessing and managing climate-related risks and opportunities. To help identify, validate, and assess potential climate-related risks and opportunities, the Company assembled a cross-functional TCFD Taskforce ("Taskforce"). The Taskforce applied a robust methodology and approach, consistent with TCFD leading practices. We evaluated potential climate-related risks and opportunities and finalized our climate-related risks and opportunities as mentioned above. Ongoing updates on the TCFD climate-related risks and updates are evaluated as part of the Company's Enterprise Risk Management program which is updated and reviewed quarterly or after a significant change in the risk landscape.<br><br>For further information refer to the Governance and Ethics section of this report. |
| | 3b) Describe the organization's processes for managing climate-related risks. | |
| | 3c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management. | |
| Metrics and Targets | 4a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. | • Greenhouse gas emissions (scope 1 and 2)<br>• Levelized cost of energy of wind and solar<br>• Annual installed generation capacity of wind and solar |
| | 4b) Disclose scope 1, 2, and, if appropriate, 3 emissions and the related risks. | Please refer to the data table on page 41 for our emissions data. |
| | 4c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets. | • Carbon neutral by 2030 for scope 1 and 2 emissions, with 100% of our electricity coming from renewable sources<br>• Revenue |

# Independent Assurance Statement

**DNV  Business Assurance USA, Inc. (DNV)** has been commissioned by the management of TPI Composites, Inc. (TPI) to carry out an independent limited level assurance engagement of Selected Information for calendar year 2021 as presented in the company's 2021 ESG Report (the "Report"). The assurance was carried out from January through March 2022.

**Our Conclusion:**
Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information is not fairly stated and has not been prepared, in all material respects, in accordance with the criteria stated.  This conclusion relates only to the Selected Information and is to be read in the context of this Assurance Report, in particular, the inherent limitations explained below.

**Selected Information In Scope:**

The scope and boundary of our work is restricted to the performance indicators included within the Report (the Selected Information) listed below. Data verified for the period January 1, 2021-December 31, 2021.

- Greenhouse Gas Emissions Scope 1 and 2
- Energy Consumption
- Diversity
    - Associate Category by Age, Gender and Race/Ethnicity
    - Board Gender Diversity (As of December 31, 2021)
    - Board Ethnic Diversity (As of December 31, 2021)
- Employment
    - New Hires by Age, Region and Gender
    - Turnover by Age, Region and Gender
- Employee Health & Safety
    - Total Recordable Incident Rate (TRIR) per 200,000 hours
    - Lost Time Incident Rate (LTIR) per 200,000 hours
    - High Consequence Incident Rate per 200,000 hours
    - Total Fatalities
- Contractor Health & Safety
    - Total Recordable Incident Rate (TRIR) per 200,000 hours
    - Lost Time Incident Rate (LTIR) per 200,000 hours
    - Total Fatalities
- Ethics
- International Organization for Standardization (ISO) Certificates
    - Number of certificates - ISO 9001:2015 Quality Management Systems
    - Number of certificates - ISO 14001:2015 Environmental Management Systems
    - Number of certificates - ISO 45001:2018 Occupational Health and Safety Management Systems

**Our competence, independence, and quality control**

DNV's established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV), and to maintain independence where required by relevant ethical requirements.  This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of any part of TPI's data or report. This is our first year of providing assurance for TPI. We adopt a balanced approach towards all stakeholders when performing our evaluation.

- Sustainability Accounting Standards Board (SASB) – Electrical & Electronic Equipment, October 2018
  - RT-EE-130a.1: Energy Management
  - RT-EE510a.1: Corruption, Bribery, Anti-Competitive Behavior Policies and Prevention Practices
  - RT-EE510a.2: Monetary Losses (Bribery and Corruption)
  - RT-EE510a.3: Monetary Losses (Anti-Competitive Behavior)
- Sustainability Accounting Standards Board (SASB) – Wind Technology & Project Developers, October 2018
  - RR-WT320a.1: Workforce Health & Safety
- GRI Indicators
  - 302-1: Energy Consumption
  - 305-1: Direct (Scope 1) GHG Emissions; 305-2: Indirect (Scope 2) GHG Emissions
  - 401-1: New Associate Hires and Associate Turnovers
  - 403-9: Work-Related Injuries
  - 405-1: Diversity of Governance Bodies and Associates

We do not express any conclusions on any other information that may be published on TPI's website or Report for the current reporting period or for previous periods.

### Scope and Approach:

We performed a **limited level** assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 revised – 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' (revised), issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance.

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2015 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

**The Selected Information has been evaluated against the following reporting criteria:**

- World Business Council for Sustainable Development (WBCSD) / World Resources institute (WRI) Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard REVISED EDITION
- Sustainability Accounting Standards Board, Electrical & Electronic Equipment, October 2018
- Sustainability Accounting Standards Board, Wind Technology & Project Developers, October 2018

DNV used a risk-based approach throughout the assurance engagement, concentrating on the areas that we believe are most material for both TPI and its stakeholders. DNV applied a materiality threshold of five percent for the Selected Information.

### Responsibilities of TPI and DNV

TPI has sole responsibility for:
- Preparing and presenting the Selected Information in accordance with the criteria
- Designing, implementing, and maintaining effective internal controls over the information and data, resulting in the preparation of the Selected Information that is free from material misstatements
- Measuring and reporting the Selected Information
- Contents and statements contained within the websites

In performing our assurance work, our responsibility is to the management of TPI; however, our assurance report represents our independent opinion and is intended to inform all stakeholders. DNV was not involved in the preparation of any statements or data included in the Report or website except for this Assurance Statement.

### Level of Assurance

We are providing a **'limited level'** of assurance. We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance conclusion, so that the risk of this conclusion being in error is reduced but not reduced to very low. A 'reasonable level' of assurance would have required additional work at headquarters and site levels to gain further evidence to support the basis of our assurance conclusion. DNV's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Assurance Statement.

**Selected Information:**

**Greenhouse Gas Emissions**

- 2021 Scope 1 Emissions ............................................................................... 18,392 mtCO2e
- 2021 Scope 2 Emissions (Location-Based) .................................................. 77,444 mtCO2e
- 2021 Scope 2 Emissions (Market-Based) .................................................... 92,667 mtCO2e

**Energy Consumption**

- 2021 Total Energy Consumption ................................................................. 888,010 GJ

**Employee Health & Safety**

- Total Recordable Incident Rate (RIR) per 200,000 hours ........................... 0.23
- Total Lost Time Incident Rate (LTIR) per 200,000 hours ............................ 0.13
- High Consequence Incident Rate per 200,000 hours .................................. 0.01
- Total Fatalities .............................................................................................. 0

**Contractor Health & Safety**

- Total Recordable Incident Rate (RIR) per 200,000 hours ........................... 0.09
- Total Lost Time Incident Rate (LTIR) per 200,000 hours ............................ 0.09
- Total Fatalities .............................................................................................. 0

**Diversity**

- 2021 Total Associates by Category
    - Direct Labor: ......................................................................................... 10,208
    - Indirect Labor: ...................................................................................... 3,354
    - Administrative: ...................................................................................... 576
    - Global Leadership Team: ....................................................................... 109
- 2021 Total Associates by Location and Gender
    - U.S. .......................................................................................................... 606
    - Asia .......................................................................................................... 1,388
    - EMEA ........................................................................................................ 4,184
    - India ......................................................................................................... 1,644
    - Mexico ...................................................................................................... 6,316
    - Total by Gender ........................................... Female - 1,730 | Male - 12,408
- 2021 Total Associates by Age ............... Under 30 - 41% | 30-50 - 55% | Above 50 - 5%
- 2021 Total Associates by Gender ......................................... Female - 12% | Male - 88%
- 2021 Total Associates by Ethnicity      Asian - 22% | Black - 1% | Latino - 46% | Middle Eastern - 29% | White 2%
- 2021 Global Leadership by Age .............. Under 30 – 1% | 30-50 - 57% | Above 50 - 42%
- 2021 Global Leadership by Gender ...................................... Female - 17% | Male - 83%
- 2021 Global Leadership by Ethnicity     Asian - 21% | Black - 2% | Latino - 12% | Middle Eastern - 14% | White 51%
- Board Age Diversity (As of December 31, 2021) ....... Under 30 - 0% | 30-50 - 17% | Above 50 - 83%
- Board Gender Diversity (As of December 31, 2021) ................... Female - 25% | Male - 75%
- Board Ethnic Diversity (As of December 31, 2021) ........ White - 75% | Black - 17% | Asian 8%

## Independence

DNV's established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals.

## Basis of our conclusion

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information; our work included, but was not restricted to:

- Conducting interviews with TPI's management to obtain an understanding of the key processes, systems and controls in place to generate, aggregate and report the Selected Information
- Performing limited substantive testing on a selective basis of the Selected Information to check that data had been appropriately measured, recorded, collated and reported;
- Reviewing that the evidence, measurements and the scope provided to us by TPI for the Selected Information is prepared in line with the agreed upon procedures and criteria
- Reading the Report and narrative accompanying the Selected Information within it with regard to criteria
- Reviewing global employee rosters at year-end at individual contributor, supervisor/manager, director, and executive leadership levels to determine percent breakdown by gender, ethnic composition, and special populations
- Reviewing recordable incidents, lost time incident, number of employees, hours worked, employee categories (RIR and LTIR)
- Replicating the RIR and LTIR following the reporting criteria below:
    - OSHA Recording and Reporting Occupational Injuries and Illness
- Reviewing sample of recordable incidents and lost time incidents

**Selected Information continued:**

**Employment**

- 2021 Total New Hires       6,417
- 2021 Turnover Rate (without impacts)     Female - 61% | Male - 38%
- 2021 Turnover Rate (with impacts)     Female - 90% | Male - 50%
- 2021 Turnover By Age (without impacts)     Under 30 - 44% | 30-50 - 39% | Above 50 - 31%
- 2021 Turnover By Age (with impacts)     Under 30 - 55% | 30-50 - 53% | Above 50 - 68%

**Ethics**

- In 2021, TPI incurred no monetary losses as a result of legal proceedings associated with bribery or corruption.
- In 2021, TPI incurred no monetary losses as a result of legal proceedings associated with anti-competitive behavior.

**ISO Certifications (9001, 14001, 45001)**

- Number of certificates - ISO 9001      11
- Number of certificates - ISO 14001      9
- Number of certificates - ISO 45001      8

The following methods were applied during the verification of TPI's environmental footprint inventories and management processes:

- Review of documentation, data records and sources relating to the corporate environmental data claims and GHG emission assertions;
- Review of the processes and tools used to collect, aggregate and report on all environmental data and metrics;
- Assessment of environmental information systems and controls, including:
  - Selection and management of all relevant environmental data and information;
  - Processes for collecting, processing, consolidating, and reporting the relevant environmental data and information;
  - Design and maintenance of the environmental information system;
  - Systems and processes that support the environmental information system.
- Performed sample-based audits of the processes for generating, gathering and managing the quantitative and qualitative environmental data;
- Examination of all relevant environmental data and information to develop evidence for the assessment of the environmental claims and assertions made;
- Confirmation of whether the organization conforms to the verification criteria

For and on behalf of DNV Business Assurance USA, Inc.

Katy, TX
**March 31, 2022**

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**DNV Business Assurance**

DNV Business Assurance is a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance.
https://www.dnv.com/assurance/

**Assurance Team**

| Role | Name |
|---|---|
| Lead Verifier | Natasha D'Silva |
| Lead Verifier | Kyle Silon |
| Project Manager/Verifier | Angela Reed |
| Technical Reviewer | Shruthi Bachamanda |

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