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Because we are reliable, passionate and collaborative people,

we are committed to safety,

we maintain a clear customer focus,

we seek continuous improvement,

we believe in teamwork,

and we realize leadership is everyone’s responsibility.

THE WABTEC DNA

Graphic design and production: LABEL
Inside our DNA

Wabtec is a global leader in the freight and transit rail market, providing a wide range of equipment, components and services to our customers in more than 100 countries. Headquartered in Wilmerding, Pennsylvania, Wabtec has expanded from its base in the United States, to become one of Europe’s largest contractors to the railroad industry and a major player in both China and India. Joining forces with Faiveley Transport in 2016 added significantly to Wabtec’s portfolio and global market position.

Today, the company has more than 18,000 employees, all of them dedicated to delivering innovative, value-added products and services to customers. Our mission is to improve the safety, efficiency and productivity of their rolling stock.

To achieve that, Wabtec aims to harness its resources in a way that demonstrates that Corporate Social Responsibility is embedded in the company’s DNA. In our manufacturing, the Wabtec Excellence Program promotes state-of-the-art processes and innovation, while the widespread use of Lean tools drives efficiencies at our plants.

For employees, our safety policy is driven by a zero-accident goal across the company, while a belief in teamwork and offering a rewarding career are central to the way we operate. At the same time, Wabtec understands its responsibility to create sustainable value for investors. Our Corporate Social Responsibility to our various stakeholders helps us to meet our business and financial objectives.

At an operating level, Wabtec comprises five business groups: Freight; Brakes & Safety; Energy, Comfort & Access; Electronics; and Transit Services. All of them share the same key goals – to have a positive effect not only on the industries they serve, but also on the communities and environment where they operate.
Wabtec: a timeline of discoveries

For nearly 150 years, Wabtec’s history has been marked by innovation, from the day that George Westinghouse demonstrated an invention that would transform railroad safety in North America. Since then, the company has expanded into new markets and has established operational facilities in more than 30 countries around the world. This growth is continuing today, with a new Wabtec taking shape on the world stage.

1869
Our history starts with the founding of Westinghouse Air Brake Company, after George Westinghouse invented the world’s first air brake system for the railroad industry.

1872
A key innovation follows, with the first automatic air brake system, where the brakes apply automatically if the train separates or if there is a loss of pressure.

1910
The company introduces electro-pneumatic brakes to subway trains, increasing the speed of brake application by the train driver.

1932
The AB Freight Control Valve sets the gold standard for braking equipment, using principles that are still applied today.
1990
The Westinghouse Air Brake name and assets are purchased in a management buyout, followed by a listing on the NYSE five years later.

1999
Wabtec Corporation is created by the merger of WABCO with MotivePower Industries, which rebuilds locomotives for U.S. railroads.

2004
Wabtec establishes itself as a pioneer in Positive Train Control (PTC) safety with the launch of its innovative Electronic Train Management System (ETMS).

2016
Faiveley Transport joins the Wabtec family, which becomes a major global player in systems, parts and services for freight and transit networks.

2019
Wabtec will celebrate 150 years since it was founded.
More than 18,000 employees worldwide in 30+ different countries and over 100 manufacturing facilities help generate an estimated $4 billion in revenue.
Meeting the challenge of the megatrends

In a rapidly changing world, Wabtec is continuously renewing its portfolio of products and services to meet the needs of its customers. At one level, this may involve changes in specific technologies for a given product sector. However, Wabtec is also aligning its portfolio with four broader megatrends that are changing the way people live and work around the world.

**Digitalization**
The digital transformation is sweeping across every industry in the global economy and the railroad sector is no exception. Digital tech is being embedded in rolling stock subsystems, signaling equipment, maintenance activities and network management. For Wabtec, digitalization is becoming both a key part of the products and services we engineer for our clients – and a driving force for further improving our manufacturing processes. Work is already underway to meet needs such as next-generation train control, autonomous freight operations, and predictive maintenance based on big data analytics. At our plants, digital tools are helping to improve our management of energy consumption and to reduce costs.

**Environmental awareness**
The impact of climate change on our planet is no longer a subject reserved for scientists. Global warming, triggered by greenhouse gas (GHG) emissions, has raised environmental awareness around the world as countries grapple with the effects of global warming. Sustainable transportation will be a key factor in meeting the challenge of climate change – with the rail sector set to play a leading role. GHG emissions from rail transportation are estimated to be up to 20 times lower than car or air travel, per passenger kilometer*. As part of this trend, Wabtec is working to increase the sustainability of its products – with the aim of reducing energy consumption and increasing the use of eco-friendly materials.

**Urbanization**
More than two-thirds of the world’s population are expected to be living in cities by 2050, compared to just over half today, according to the United Nations. Faced with the rise of the megacity, the rail industry is ideally positioned to meet the transportation needs of the future. Rail offers a clean, reliable and cost-effective solution for sustainable mass transit, while rail freight has the capacity to meet consumer needs. Along with its long-haul offering, Wabtec has a world-class portfolio of products and services for the subway networks needed to accommodate the megatrend of urbanization.

**Transportation networks**
As economies develop, so do the transportation networks that keep their people on the move and help to pave the way for future economic growth. In many developing countries, rail network expansion is a major part of this virtuous circle. From high-speed trains to metro systems and trams, transportation operators are turning to rail services for an efficient infrastructure. As a global player, Wabtec is already operating in the Asia Pacific region that is witnessing much of this network growth, with a significant presence in China and India.

* * Source: 2008 Deloitte study for ADEME (French Agency for Environment and Energy Management).
Wabtec’s mission to create value for clients and our other stakeholders goes hand in hand with our commitment to Corporate Social Responsibility. From design and manufacturing, through to aftermarket services, our engineers provide responsible solutions to the challenges faced by railroad OEMs and network operators.

Responsibility: all along the value chain

**Where product design meets project design**
With its wide variety of markets, Wabtec has different approaches to the start of the value chain. For the freight market, particularly in the United States, the design focus is largely on the standardization of products and the development of a catalogue that meets a broad range of requirements in the most cost-effective way. In the transit sector, and notably in Europe, the focus is on project design – where solutions are developed specifically to meet the needs of each client. In some cases, this may involve customizing a standard product, while in others, a completely new component or subsystem may need to be commissioned from scratch. With more than 3,000 patents and a wealth of intellectual property to its name, Wabtec’s history of excellence in engineering and innovation is shared across the entire company.

**Sourcing raw materials**
From product and project design, the next step in the value chain is the provision of raw materials for our production teams. As a truly international player, Wabtec is able to harness its global procurement network for the benefit of clients, ensuring that our products are competitive and comply with the highest standards of safety and quality. The company’s growth through acquisition in recent years has further strengthened our position for global sourcing. And wherever we operate, due diligence in supply chain management and responsible sourcing are key features of that procurement process.

**Efficient production**
With the design and materials in place, our manufacturing plants use the Wabtec Excellence Program to produce systems and components in the most efficient way possible. The adoption of Lean methodologies and tools ensures that Wabtec facilities have a clear objective of customer value, product quality and continuous improvement. Safety, the avoidance of waste and the introduction of digital technology are also key features of the program, as Wabtec makes the transition to Industry 4.0. Our plants also share best practices and use common metrics in order to help meet their cost reduction targets.

**Implementation of products**
Once the production process has been completed, the next step is delivery and installation. Depending on the type of product and the contractual agreement, Wabtec can either deliver the finished components or parts to the customer, or its engineers can perform the installation of the equipment into a customer’s rolling stock. In other areas, such as complex locomotive systems or platform screen doors and automatic platform gates for subways, Wabtec’s offering covers the complete design, production and implementation process. All handovers of equipment and systems are accompanied full certifications.
Aftermarket services
As a major global supplier of original equipment, Wabtec has an extensive installed base of equipment in the field. In keeping with the different types of products, Wabtec can provide a wide variety of aftermarket services. These range from the supply of spare parts and larger components to corrective or preventive maintenance, the retrofitting of complete systems, or the upgrading of original-supplied equipment. All aftermarket parts and services are fully certified to international standards and designed to maximize the life of our customers’ rolling stock and railroad infrastructure.

DIGITAL ANALYTICS FOR LOCOMOTIVES
Among the many examples of our passion for innovation is WabtecONE™, a railroad asset management platform that collects real-time data from rolling stock and uses it to create predictive models of a locomotive’s availability and operational safety. By harnessing the power of data analytics, Wabtec can improve rolling stock performance, maintenance scheduling and operating efficiency.
In 2019, Wabtec will celebrate its 150th anniversary. This milestone stands as a testament to the legacy of our founder, George Westinghouse, and the contributions of countless employees over the past century and a half. Wabtec began as the embodiment of George Westinghouse’s mission to make rail travel safer. As that mission became reality, the rail industry thrived and economies and societies around the world benefitted.

Our sustainability efforts continue to gain momentum

Along the way, we have had numerous challenges to navigate while attempting to serve the best interests of our customers, employees, shareholders and communities. Our industry has faced the demands of urbanization, digitalization, environmental protection and rapid technological advancement. All these issues have converged with our core mission of safety to create an unparalleled momentum toward the goal of sustainability. To ensure that the appropriate resources and a continuous focus are directed at our sustainability efforts, we have created a dedicated corporate function to coordinate and lead our global sustainability activities.

We are ensuring that Wabtec’s next 150 years are even more successful than our first 150 years
Leading & measuring sustainability performance
We believe this added level of structure and organizational discipline will serve to maximize the value that our sustainability efforts create for Wabtec and those associated with our company. For this reason, I am extremely proud to introduce our 2018 Corporate Social Responsibility Report. This is the first report we have prepared since the comprehensive integration of Wabtec and Faiveley Transport. In this report, we identify key initiatives and metrics pertaining to three primary categories of sustainability performance: Environment; Well-Being; and Citizenship.

“The environment is a current area of focus and strategic priority.”

Corporate Social Responsibility
The Environment is a current area of focus and strategic priority. In 2018, we initiated the measurement of all CO₂ emissions at a corporate level based on the Greenhouse Gas Protocol. Our launch of a comprehensive, global, standardized framework for measuring and managing emissions led to the development of specific initiatives ranging from the installation of solar screen shades and panels to the improvement of waste management processes. As an example, our Wabtec team in Hosur, India, has implemented a bio-decomposing machine which converts food waste into usable manure for gardening activities on our site. The Hosur team is also using treated water from its fully-automated sewage treatment plant in various landscaping projects, as well as to operate toilets throughout the facility. Sustainability also plays a leading role in the design and manufacture of our products. While the rail industry is inherently more eco-friendly than the trucking and air transport industries, tremendous opportunity remains for even greater environmental innovations. Wabtec remains focused on designing products that are lighter, smaller in mass, quieter, and safer to operate. This work is done in close partnership with our customers to provide more efficient passenger transport and freight hauling solutions.

Well-being starts with a commitment to safety
In terms of Well-Being, Wabtec has an organization-wide goal of zero accidents. A safe workplace for our employees is our first priority. Achieving this objective demands a constant commitment to providing safe equipment and proper training in every operating unit and department across our organization. As a result of these efforts, we recently celebrated our lowest accident rate in a decade. But one accident is too many. And we will not be satisfied until we have eliminated all accidents and incidents from our operations.

A direct connection to our communities
With more than 18,000 employees around the world, Wabtec maintains operations in more than 30 countries. The vast majority of our team members live in the very communities in which they work. That is why Citizenship is such an important part of our company culture. Through the Wabtec Foundation, our company has contributed millions of dollars to charitable organizations and community groups that have personal relevance and significance to our employees. Our employees also voluntarily give their own time and financial resources to support our communities. This is an undertaking that provides us with a shared purpose while improving the health of our local neighborhoods and the stability of our broader society. At the corporate level, we take tremendous pride in being a part of industry programs like Railsponsible, which seek to continuously improve sustainability practices throughout the railway industry supply chain.

Ensuring a successful future
We will continue to look for ways to partner inside and outside our organization in an effort to positively drive sustainability results that improve our environment, the well-being of our stakeholders, and the connection we have to our local communities and the broader society. Our engineers continue to execute on a strategy of replacing traditional materials, like metals, with materials of lower mass, higher lifecycle duration and greater recyclability. Implementation of additive manufacturing technology will not only reduce the weight of the products we produce, it will also decrease the waste generated in the prototyping and production processes. Our environmental focus has led to developments in hybrid propulsion systems that enable locomotives to switch efficiently between fuel and electric power from overhead lines based on the most economical and ecological power source available on the track. From oil-free compressors and low Global Warming Potential refrigerants to EcoPark systems that adapt HVAC performance while parked, Wabtec is committed to ongoing environmental innovations that benefit our industry and the world around us. In doing this, we believe we are contributing to a greater good while also ensuring that Wabtec’s next 150 years are even more success than our first 150 years.

Sincerely,
People
WABTEC IS A TRULY INTERNATIONAL COMPANY, WITH MORE THAN 18,000 EMPLOYEES LOCATED IN THE THREE MAIN GEOGRAPHICAL BLOCS – the Americas; Europe, Middle East & Africa; and Asia-Pacific. Along with the regional spread, Wabtec’s employee profile also reflects the diversity of the world’s working population – with a younger demographic in Asia’s emerging economies, such as India, and more experienced teams in the United States and the European Union. Our strong presence in the EU reflects the longstanding presence of Wabtec in the region, along with the consolidation of Faiveley Transport.

≈ 18,000
EMPLOYEES

44.2
YEARS (AVERAGE AGE)

WABTEC EMPLOYEES PER REGION
(percentages)

AMERICAS (38)

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>U.S.</td>
<td>29</td>
</tr>
<tr>
<td>Rest of Americas</td>
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EMEA (48)

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<tbody>
<tr>
<td>European Union</td>
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</tr>
<tr>
<td>Rest of EMEA</td>
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</tbody>
</table>

APAC (14)

<table>
<thead>
<tr>
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<th>Percentage</th>
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<tr>
<td>India</td>
<td>6</td>
</tr>
<tr>
<td>Rest of APAC</td>
<td>8</td>
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</tbody>
</table>

WABTEC AVERAGE AGE
(percentages)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>&lt; 30</td>
<td>14.12</td>
</tr>
<tr>
<td>30 – 39</td>
<td>25.72</td>
</tr>
<tr>
<td>40 – 49</td>
<td>24.78</td>
</tr>
<tr>
<td>50 – 59</td>
<td>25.46</td>
</tr>
<tr>
<td>60 +</td>
<td>9.92</td>
</tr>
</tbody>
</table>

SAFETY PERFORMANCE
(injuries per 100 employees, for Operational sites)

<table>
<thead>
<tr>
<th>Year</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>5.9</td>
</tr>
<tr>
<td>2008</td>
<td>4.1</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
</tr>
<tr>
<td>2010</td>
<td>3.7</td>
</tr>
<tr>
<td>2011</td>
<td>3.5</td>
</tr>
<tr>
<td>2012</td>
<td>3.3</td>
</tr>
<tr>
<td>2013</td>
<td>3</td>
</tr>
<tr>
<td>2014</td>
<td>2.2</td>
</tr>
<tr>
<td>2015</td>
<td>1.9</td>
</tr>
<tr>
<td>2016</td>
<td>1.7</td>
</tr>
<tr>
<td>2017</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Human resources and employee well-being

A responsible employer at all its locations, Wabtec has clear policies for well-being, training and antidiscrimination. Ensuring that employees have a positive work environment where they can reach their full potential is fundamental to the way we do business.

Meeting the different needs of our employees is an important part of Wabtec’s Corporate Social Responsibility, which begins with helping our people to improve their sense of well-being, both during and outside working hours. Wabtec has operated well-being programs for more than 15 years, ranging from health screenings and flu vaccinations to coaching in areas such as chronic diseases, lifestyle improvements and maternity care. In some cases, our sites have worked in partnership with local hospitals and other agencies to organize health fairs, or have funded discounts for employee gym memberships.

Fulfilling ambitions through training
Maintaining and developing the skills of our employees is another key feature of Wabtec’s present and future. Training programs are delivered across the full spectrum of our activities and all levels of the organization – from technical and managerial skills to areas such as safety, quality standards, compliance and ethics. Our learning programs, which are an integral part of the Wabtec Excellence Program, enable the company and its people to remain fully aligned with the demands of an evolving railroad market.

Antidiscrimination, a clear position
Our Code of Conduct and Ethical Behavior makes it absolutely clear to employees that Wabtec does not tolerate discrimination, whether in regard to race, color, gender, sexual orientation, gender identity or expression, age, religion, national origin, disability, protected veteran and other uniformed service status, or any other characteristic protected by law. Our Human Resources policies are designed to promote equal employment and career development opportunities for all qualified people.

More than 15 years of well-being programs.
Among Wabtec’s core values, safety comes top of the list. We strive to provide a safe environment for all our employees and we maintain a health and safety program that meets or exceeds the highest standards of our industry.

Ensuring that our people return home safe and sound after a day’s work is our absolute priority at Wabtec. The company considers itself to be a leader in hazard assessment methodologies and behavior-based performance programs. The “2-Minute Warning” program to encourage employees to spot potential risks and the General Process Sequence (GPS) for safely carrying out every task are two examples of putting theory into practice.

A Red Flag warning
With the “2-Minute Warning” program every employee is encouraged to take two minutes to think about the job they are about to carry out – and to check for any potential dangers, known as Red Flag Conditions, in their immediate work area. They are also encouraged to speak to a colleague if that person is performing, or is about to perform, an unsafe action.

RFC (Red Flag Conditions) Notification cards are available at Wabtec plants for employees to complete and their supervisors to act upon using the QRQC process (Quick Response Quality Control). Risks are then dealt with before an accident can occur.

A systematic approach to safety
GPS provides employees with a clear guide to their work and its potential hazards. Each job is broken down into a series of tasks, the hazards associated with each task, and the relevant counter-measures to be taken – along with the correct Personal Protection Equipment (PPE) to be worn. All sequences are reviewed on an annual basis, while an individual GPS will be assessed after any Lost Time Accident or Recordable Accident. Combined with video content, the GPS is made available as an online training module.

The importance of teamwork
Such programs also reflect our belief in driving the safety agenda as a team. Creating a safe environment is the responsibility of management, while employees are expected to take responsibility for following the safety policies. As a result, staying safe is a constant conversation not only between supervisors and direct reports, but between employees and co-workers. That combination of policy and practical engagement to reducing accidents has delivered tangible results. Wabtec has registered a fall in the injury rate ever year for the past 10 years, dropping from 5.9 per 100 employees in 2007 to 1.2% in 2017.

18 sites certified to OHSAS 18001 standard for their occupational health and safety systems.
The heart of our business
Our employees’ welfare is at the very heart of our business, and Wabtec works hard to ensure that our people have the support they need to succeed. At the same time, we also care about the communities where we operate and are determined to playing our role as corporate citizens. At Piossasco, both these commitments have been backed by policies and practical action.

Employee-centric
The 2017 winner of the George Westinghouse Brake-Through in Safety Award (for achieving zero accidents with 917,250 hours worked), the Faiveley Transport Italia site offers flex time to its employees, carries out regular Stress and Well-Being surveys, and provides an annual welfare payment. Diversity in its various forms is promoted through recruitment, while family days and sports competitions are among the events organized outside work hours. For families, the company also subsidizes the cost of childcare for employees at a local nursery.

Local engagement
As part of its relationship with the community, help is provided to associations that offer recreational activities for long-standing and retired employees, for example, along with the local branch of the Italian Red Cross first aid unit. However, citizenship is also about offering career opportunities for local people. At Piossasco, links have been created with educational institutions, with career events being organized on a regular basis. High school students whose parents are our employees can meanwhile take up a two-week work experience placement at the site each year in June.

Putting policies into action
“We have a wide range of well-being programs at Piossasco, and they all share a common aim – to create a better, healthier and more sustainable workplace. Their number has been steadily increasing in a variety of fields – communication, involvement and engagement, organizational well-being, and people development – since 2011. In the last two years, we have focused on our “Improvement Path”, which covers processes and projects in areas such as job rotation, innovation ideas, the induction program, communications, and above-target prizes. Employees find it very motivating, as it gives them a sense of belonging and commitment. Clearly, supporting the community with initiatives and associations is also important to us – and we are building strong relationships with local schools and universities as part of that support. Though we have made progress in all these areas – employee engagement, career development and community involvement – we also know there is room for improvement and that there is still more to do at Piossasco.”

Simona C., HR Director, Italy
Environment
WHILE WABTEC HAS BEEN WORKING TO REDUCE ITS GREENHOUSE GAS (GHG) EMISSIONS FOR MANY YEARS, the first comprehensive assessment of those emissions was carried out in 2018 for 2017 data, along with an analysis of electricity and gas consumption in our three geographies. CO₂ emissions were calculated within the scope of three different categories: direct emissions by our industrial plants and vehicles, and two forms of indirect emissions – our electricity suppliers, and upstream/downstream activities. As for sustainability initiatives, these are concentrated in seven areas, covering the full spectrum of reducing consumption of resources, minimizing waste and increasing recycling (see opposite).

**ENERGY CONSUMPTION BY REGION**

<table>
<thead>
<tr>
<th>Region</th>
<th>Electricity (in kWh)</th>
<th>Gas (in m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>152,681,419</td>
<td>41,410,600</td>
</tr>
<tr>
<td>APAC</td>
<td>113,560,007</td>
<td>13,881,068</td>
</tr>
<tr>
<td>EMEA</td>
<td>199,454,965</td>
<td>69,037,585</td>
</tr>
<tr>
<td>Total</td>
<td>235,600,072</td>
<td>354,425,572</td>
</tr>
</tbody>
</table>

**DEPLOYMENT OF OUR 7 SUSTAINABILITY INITIATIVES**

- Sites Involved: 94
- Countries Involved: 23
- Completed: 103
- In Progress: 16
- Selected for 2017-2018: 132

**CO₂ EMISSIONS PER SCOPE**

<table>
<thead>
<tr>
<th>Scope</th>
<th>Emissions (in metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1 Direct</td>
<td>74,761</td>
</tr>
<tr>
<td>Scope 2 Indirect</td>
<td>107,611</td>
</tr>
<tr>
<td>Scope 3 Indirect</td>
<td>31,861</td>
</tr>
</tbody>
</table>

* 2017 will be used as our base year for future environmental reporting and comparisons. All reported values were calculated to the best of our knowledge and used recognized methodologies, such as the GHG Corporate Standard protocol. If Wabtec acquires new activities or if any discrepancies are identified, the figures for the 2017 base year will be recalculated accordingly.
Protecting the environment: emission reporting and practical initiatives

As a global industrial company, manufacturing is the core activity of our business. The scale of our industrial facilities has made sustainability a factor at every stage of the production cycle – from processes to outputs at our plants. To gauge the level of our environmental impact, Wabtec has begun reporting its CO2 emissions, while at the same time deploying a set of seven concrete initiatives to drive sustainability at all our locations.

**A key driver of sustainability for any international company is a detailed understanding of its environmental impacts.** Having integrated a significant number of factories into its global network since 2016, Wabtec carried out its first reporting exercise on the CO2 emissions of its plants in 2017. Emissions were calculated using the Greenhouse Gas Protocol as a reference point and were reported in three categories: direct emissions by production sites and vehicles, along with two types of indirect emissions – by the electricity producers who supply power to our plants, and by upstream/downstream activities, which in 2017 focused on business travel. Moving forward, emissions reporting will be carried out every year.

**Conserving power**
In addition to the work carried out on reporting, a series of seven practical initiatives have been launched across our plant network to improve our sustainability. The first of these is to replace conventional lights with LEDs at our locations. LED technology provides an energy efficiency gain of 80%-90%, while UV emissions are close to zero and the lights will last for around 50,000 hours. About 20 sites have already switched or are in the process of switching to LEDs. Heat exchangers are meanwhile being deployed at certain sites as an alternative to providing heating/cooling systems that require more energy. Reducing the need for cooling is also being achieved by a third initiative – installing solar screens onto windows, thereby cutting out 85% of the heat, glare and UV rays from the sun. By contrast, solar power is being harnessed at plants in the UK and India, using panels that require little maintenance and can last up to 30 years. Overall, Wabtec aims to reduce its energy consumption in 2018 by 5%.

To reach this target, a more detailed road map will be communicated in next report.

**Protecting water supplies**
Like energy, water is a precious resource that needs to be consumed with care – and is the focus of two further initiatives. Wabtec plants in Europe, South America and Asia are in the processing of installing leak detection systems to their pipe networks, enabling maintenance personnel to rapidly intervene. Meanwhile, by installing rainwater harvesting systems, a number of plants are also able provide water on-site for a variety of non-drinking purposes (see page 21).

**Making the most of waste**
Inevitably, all manufacturing processes create a certain amount of waste material – the focus of our seventh initiative. Wabtec is actively involved in reducing the amount that goes to landfill in several different ways – sorting and recycling materials such as aluminum, glass and paper; composting suitable organic matter; and providing energy-from-waste plants with other material. With all these sustainability initiatives, our aim is for continuous, measurable improvement every year.

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**A choice of sustainability initiatives**
Every operating unit of Wabtec will select at least two of the seven initiatives to introduce in 2018, depending upon the local conditions:
- replacing conventional lights with LED lights
- installing heat exchangers
- installing solar screen shades on windows
- installing solar panels
- installing leakage detection systems & mobile energy counters
- installing rainwater harvesting systems
- waste management improvement
Protecting the environment by design

Wabtec’s design engineers are using innovation to create new, more eco-friendly products – and to improve the sustainability of existing equipment in our catalog.

As part of its contribution to more sustainable railroads, Wabtec is continuously reviewing its portfolio and looking to replace traditional materials and processes with more eco-friendly alternatives. Our HVAC (Heat, Ventilation, Air Conditioning) systems use low GWP (Global Warming Potential) refrigerants, for example, while our compressors are based on oil-free technology. Similarly, some metals are being replaced with materials that have a lower mass, a longer life and greater recyclability – while others are being deployed with much greater efficiency. The use of metal powders to create products by Additive Layer Manufacturing is leading this trend to a zero-waste use of resources.

A sustainable life cycle

Along with the materials being used, innovation is also being applied to the way that equipment operates. Wabtec’s latest braking systems are compact, lightweight units that feature state-of-the-art controls such as wheel slide protection and safety function diagnostics. To improve sustainability in the later stages of the product cycle, Wabtec has developed repair technologies that reduce or eliminate scrap, for example during the refurbishment of door panels. Maintenance operations are also being enhanced by the combination of sensors and connectivity to provide the remote monitoring of equipment.

Less power, more efficiency

Achieving similar or better performance with less energy is the goal of product designers in all industries – including railroads. From locomotives to transit and freight vehicles, Wabtec is developing a range of solutions to improve efficiency.

Reducing the energy consumption of rolling stock is a key target of Wabtec’s designers. We are already delivering hybrid propulsion solutions in the U.S. and UK that allow locomotives to switch efficiently between fuel and electricity – depending on which is the most economical and ecological power source available. Among the on-board systems, HVAC is a major consumer of power, and an area of opportunity for improvement. Wabtec has a portfolio of five distinct energy-saving products for HVAC services that offer energy savings of up to 60%. These range from CO₂ detectors that allow services to be regulated according to the number of passengers aboard (FreshAir®), to harnessing the power of regenerative braking for HVAC purposes (RegenAir®).

Aerodynamic design

Reducing consumption, along with the associated emissions, can also be achieved through the physical design of rolling stock and a more sparing use of energy-intensive operations. The development of flat pantographs to improve the aerodynamics of high-speed trains and use of Advanced Pressure Control algorithms in brake systems to limit control oscillations – thereby reducing compressor activity – are two such enhancements. In other areas, the key to improvement is a basic technology change – with the switch to electric door mechanisms from pneumatic systems being a prime example.

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Access to a plentiful water supply is a challenge in many regions of the world. However, it can be particularly acute in India, where groundwater resources have been depleted by intensive farming. Among the solutions is the artificial recharging of those resources by constructing pits or wells to collect rainwater. Wabtec is playing its part in solving this problem by introducing different forms of rain-harvesting at its site at Hosur. In 2017, a percolation pit was built to collect rainwater that is drained from the entire site by a network piping, and is subsequently used for gardening and groundwater recharging.

Separately, roof areas at the site are being equipped for water collection and filtration, providing water for a variety of purposes, except for drinking and cooking. Two buildings, with a roof surface area of nearly 600 m², have already been connected to pipes, but coverage will eventually be extended to the rest of the site – covering some 11,500 m². Plans have also been drawn up for a third form of rain-harvesting at the facility, which involves recharging an existing bore-well through piping and natural filtration to replenish the supply of groundwater. Separate from these rainwater initiatives, waste water is being recovered from our production processes and other on-site sources before being filtered and purified for re-use.

Doing our part

“As water is becoming a scarce resource in India, we have developed a series of programs to reduce consumption, starting with “Zero liquid discharge”. The latest project carried out by our maintenance team, supported by an EHS engineer, is “Zero Solid Waste 2018”. As part of our waste management process, we have installed a biodestructor to recycle garden and canteen waste; a paint sludge separator; a coolant oil-water separator and a shredder. We are now self-sufficient in water and are recharging bore wells with rainwater, which helps all the communities living near our Hosur plant. It makes me and all employees proud to work at Wabtec.”

Dr. Sujatha N.,
Managing Director, Wabtec India
WABTEC UNDERSTANDS ITS RESPONSIBILITIES TO A BROAD RANGE OF STAKEHOLDERS – from business partners, employees and investors to local communities and society at large. The common thread to all these relationships is Wabtec’s commitment to ethical conduct by its employees and its compliance with the highest standards of corporate behavior. At the same time, our business activities reflect our responsibility to provide class-leading products for the safety and comfort of railroad passengers around the world. This social duty to protect people is also reflected in the work of the Wabtec Foundation, which provides charitable funding for a wide range of good causes in the communities where we operate.

THE WABTEC FOUNDATION IN 2017

Beyond the need to satisfy mandatory regulations of each country, Wabtec also aims at reinforcing its social and worldwide responsibility toward all communities in which we operate. We expect to do good business while helping create a better society. We are deeply convinced that it is important to make profits in an ethical way that is respectful not only of laws, but also of individuals and local stakeholders.

Indeed, beyond our traditional economic and legal responsibilities, we have an ethical and philanthropic responsibility to answer the rising concerns in society and business. For many years, we have expressed our citizenship ambition through various concrete initiatives, and through our support for educational and social programs. A few of them are described in the next pages.
Ethics and anticorruption

Integrity has been a hallmark of Wabtec since the very beginning. Ethical behavior in our everyday work, enforced by a clear code of conduct, is ensuring that we live up to those standards today.

Wabtec has a proud history of excellence and high ethical standards. We believe that we are not only responsible for doing things right, but also for doing the right things. That belief is codified in a set of policies that all our employees must abide by in their dealings with colleagues, customers, suppliers, investors and any other stakeholder.

High standards, clear expectations
Our Code of Conduct and Ethical Behavior is both clear and comprehensive, covering topics ranging from conflicts of interest, insider trading and antitrust to ensuring diversity and equality of opportunity at our company.

A separate antibribery and anticorruption policy is equally rigorous and includes areas such as hospitality, gifts and donations. A further policy on related party transactions involving relatives of company employees reflects the same requirements by Wabtec of the highest ethical standards from its people.

Speaking up
In addition to written guidelines available to all employees and the availability of management to provide advice, Wabtec also provides employees with an ethics and compliance hotline that can be accessed from around the world.

Keeping passengers safe

Westinghouse Air Brake was founded in 1869 to keep people and property safe on a railroad, and that responsibility has not changed. Our flagship products have brought new levels of safety and efficiency to rail networks around the world.

Thanks to a continuous process of innovation, Wabtec has developed a wide range of solutions to improve railroad safety and sustainability. I-ETMS®, Wabtec’s Positive Train Control system, significantly reduces the potential for train accidents by using an on-board computer and GPS positioning. I-ETMS® can slow down or stop a train if it exceeds authorized speeds, if it moves through a switch that has been left in the wrong position, or makes an unauthorized entry into a work zone. A display screen gives the crew a wealth of train and track information, along with warnings if required.

Metroflexx
An advanced brake control system, MetroFlexx helps keep passengers safe on mass transit rail systems. With a very fast response time from the driver’s cab, Metroflexx provides the service brake, emergency brake and wheel slide protection throughout the train. Connectivity includes links to the propulsion system – to deliver electrodynamic braking – and access to real-time data and diagnostics.

Greater comfort
At the same time, Wabtec provides railroad operators with an overhaul service that refurbishes their existing locomotives and transit cars – offering passengers new levels of comfort, while also making the rolling stock more fuel-efficient and environmentally friendly.
Solid relationships with our stakeholders

Our corporate responsibility is broad in scope, including other companies, the environment, and the well-being of local groups and institutions. We strive to meet their needs and to fulfill our duties to the corporate sector and society as a whole.

As a responsible company, Wabtec works with a wide variety of stakeholders. We understand that we have a duty of care not only to business organizations but also to the environment and the local communities where we operate. In short, the global impact of our operations means that we have social, as well as business responsibilities. Given our complex value chain, Wabtec operates with a variety of corporate stakeholders – customers, suppliers and employees, along with financial institutions, government agencies and investors. At a societal level, Wabtec is involved with local groups, academia and institutions.

Delivering value to customers
For our customers, Wabtec delivers innovative solutions that will enhance their business. While this typically involves an off-the-shelf offering from our product catalog, in some cases, it will lead to the joint development of a tailored solution for their rolling stock needs. The common objective is to maintain high levels of customer satisfaction with our product quality, cost and delivery – and, increasingly, with our commitment to sustainability.

Sourcing from responsible suppliers
Sustainable railroads are becoming a key factor for operators and passengers alike. Wabtec is meeting that demand not only by improving its own design and production processes, but also by taking part in rail supply chain initiatives such as Railsponsible. Its members aim to promote sustainable procurement by signing up to a charter that uses the 10 principles of the United Nations Global Compact to define sustainability. Widely recognized as the gold standard for corporate citizenship, these principles cover the areas of human rights, labor, the environment, and anticorruption. Since the initiative was launched in 2015, 800 suppliers have been assessed and scored, with the results shared among Railsponsible members.

A shared understanding of behavior
As we work with our colleagues and other stakeholders, Wabtec expects its people to exhibit three key behaviors – Reliability, Collaboration and Passion. They set the framework for how management interacts with operational teams, and how people engage with their daily work. To further embed those behaviors, Wabtec provides career development, technical training and a range of HR support services, so that our employees can realize their true potential as stakeholders in our company.

Fulfilling our duties
As a responsible organization, Wabtec is fully committed to due diligence and compliance with regulations. We ensure that financial institutions and investors are provided with timely and transparent information about the company’s progress, risks and future prospects. Similarly, we make it our duty to ensure that taxes and dividends are paid on time and in full.
Charities and community organizations
Created in 2006, the Wabtec Foundation supports a wide range of charitable organizations, while also promoting learning through matching funds for education and Wabtec Foundation Scholarships. The Wabtec Foundation has contributed to numerous charitable causes over the years, many of which have personal connection to our valued employees on the communities in which they live.

In addition, Faiveley Transport provided donations to groups such as L’Étoile Martin, a charity that supports children in France who are suffering from cancer, the Genshagen Foundation in Germany for promoting European culture and politics, and a Senegalese association that helps underprivileged young people in the country’s capital, Dakar. In India, the company is supporting a range of different projects, covering healthcare, education and vocational training, and the environment.

A trusted partner for authorities
By the nature of our products and services, Wabtec also works closely with a range of national and local authorities. These range from regulatory and certification bodies in the field of transportation to environmental agencies and local councils where our production sites are located. Our commitment to internationally-recognized quality standards, whether for products or our manufacturing sites, provides these authorities with a guarantee of good corporate citizenship. Wabtec also supports initiatives for local development that bring together the business community and regional governing bodies.

Building academic links
Wabtec has links with universities around the world, supporting research projects and individual students. Among these links is our membership of the NextManufacturing Center Consortium at Carnegie-Mellon University in Pittsburgh, Pennsylvania. The Center is part of the university’s College of Engineering and is a world leader in research into additive manufacturing – commonly known as 3D printing. Its scientists are opening up new paths in the design, processes, materials, tools and training associated with this technology, which is set to change the face of manufacturing – particularly for metal components. Along with its relationships with universities, Wabtec is involved in numerous projects with local schools near its operational facilities, offering learning support and work experience.

Improving the industry
As a responsible player in the global railroad sector, Wabtec works closely with the industry’s institutions to promote ever higher standards. In 2017, the European Railway Industry Association (UNIFE) has provided a draft of a new quality management standard for the rail sector which was published by the International Organization for Standardization as the ISO/TS 22163. As a member of the IRIS Steering Committee and numerous working groups, Wabtec played a key role in developing the new standard, which will lead to an audited certification process for equipment manufacturers and system integrators.

Wabtec fights against child labor
Child labor is a violation of fundamental human rights, potentially leading to lifelong physical or psychological damage.
Wabtec prohibits the use of child labor in all its units. No employee is made to work against his/her will or work as bonded/forced labor, or subject to corporal punishment or coercion of any type related to work. Furthermore, Wabtec does not entertain, approve or condone child labor in the supply chain’s work places. In this regard, Wabtec reserves the right to cancel orders and terminate the business relationship with suppliers which do not comply with this requirement.
Conditions for financial support
In terms of process, charities and educational institutions are invited to submit written applications for grants. U.S. applicants must be certified as tax exempt under Section 501(c)(3) of the Internal Revenue Code, which covers charitable non-profit organizations. Most of the foundation's applications are from charities in the United States, and due diligence is carried out to ensure they qualify under Section 501(c)(3). Those applying from outside the U.S. are required to demonstrate their status as a recognized charity.

Being a good citizen
Despite the breadth of donations, certain situations are outside our remit, such as funds for individuals' personal needs, religious organizations or economic development. However, scores of charitable causes and educational institutions benefit every year from the work of the Wabtec Foundation and the company's belief in good corporate citizenship.

THE WABTEC FOUNDATION: A HELPING HAND

Created with the single aim of providing charitable gifts, the Wabtec Foundation helps a wide range of organizations and individuals every year. In general, we support charities and others causes that have a connection with one or more of our employees - typically in the United States but also on a worldwide basis. Past beneficiaries have included groups working in social services, safety, youth support, healthcare, sports, community activities and diversity. In addition to charities, the foundation also provides higher educational support for universities, colleges and students – either in the form of a gift matching program or through Wabtec Foundation Scholarship Program.

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Creation of the Wabtec Foundation.