United Technologies

2018 Corporate Responsibility Report

Contents

About this Report

This report provides a lens into the principles behind United Technologies Corporation's environmental, social and governance (ESG) practices—and the progress we have made toward achieving our goals. Where possible, we use storytelling and case studies to give voice to the impact our efforts are having on employees, customers, partners, communities and the environment.

We engaged with many stakeholders in the preparation of this report, and our results are presented in accordance with the Global Reporting Initiative (GRI) framework—the world's most widely used sustainability reporting framework.

CEO Message

Gregory J. Hayes
Chairman & Chief Executive Officer

Corporate responsibility covers a broad range of ideas and actions, but it is fundamentally about how a company takes ownership of its role in society—how it seeks to safeguard its employees, enrich its communities and sustain the planet. That may sound simplistic, but in a rapidly urbanizing, technology-driven, resource-constrained world, it is anything but.

We know the challenges that lie ahead for communities globally are not insignificant, but as you'll read in our Corporate Responsibility Report, tackling big, societal problems is core to our DNA. Across the United Technologies' businesses of Carrier, Otis, Pratt & Whitney and Collins Aerospace Systems, we have learned some simple truths. When you create a workplace environment that respects ethical practices, encourages diversity of thought, supports continuous learning and promotes disruptive innovation, then positive, social impact is not only achievable, it is inevitable.

It starts with our employees. As a manufacturer and service provider with operations around the world, we understand that our workforce must be safe, well-trained, and well-resourced—if they are not, then none of our goals will be met. United Technologies has long been a pioneer in workplace Environment,

Health, and Safety benchmarks. Since 1997, we have reduced our greenhouse gas emissions by 33 percent, our water consumption by 62 percent, and delivered some of the best workplace safety rates among our peers, while nearly tripling our sales.

We also recognize how quickly jobs can become obsolete—and acknowledge that companies don't innovate, people do. So, we make it easy for our employees to practice lifelong learning, providing the support to continue their education, and to develop new skills. Since our Employee Scholar Program began more than two decades ago, we have invested more than $1.3 billion in educational expenses for employees in more than 60 countries to earn degrees. This may well be the single best investment our company has ever made.

We are also committed to diversity and inclusion, in race, gender and orientation, as well as thought. We want everyone under our roof to know that they belong. We have numerous employee resource groups, including African American, Disability, LGBT Pride, Military Veterans, and others that promote professional development, mentoring and community outreach. We are committed to an aggressive goal of achieving gender parity across our

senior leadership by 2030. In 2017, we launched a Re-Empower Program for individuals who took a voluntary leave from the workforce—often women who left to raise children or care for family members—and who now receive the training, support and confidence to re-enter the professional world.

United Technologies is a leader in industries that are at the epicenter of society's most exciting and daunting challenges. Our cities are becoming larger and more densely populated, straining basic infrastructure and requiring buildings to be more expansive, intelligent and connected. As a global leader in building technologies, we led the charge in phasing out ozone-depleting refrigerants. Today we continue to introduce many of the world's most energy-efficient heating, air-condition-ing, and refrigeration systems, while also bringing new regenerative technologies to elevators.

Air travel represents another challenge and opportunity. Eighty percent of the world's population has never traveled in an airplane. With rising global incomes, many of those individuals will be airborne in the coming years.

Today more than 29,000 commercial aircraft are in service and that number is expected to nearly double over the next two decades. As a leading aerospace company, we already manufacture one of the world's most fuel-efficient jet engines. We also conduct industry testing for sustainable alternative jet fuels, which may help decrease our dependence on fossil fuels in the future. But we are committed to doing more. We recently shared plans to launch in 2022 what we're calling our Project 804 X-plane. Our hope is to bring even greater fuel efficiency to aviation through advances in hybrid-electric propulsion.

Of course, product innovation is just one part of the equation. We must also be a force for good in supporting the communities where we live and work. And that means giving more than just money. We encourage all our employees to give back to their communities, and have a particular interest in supporting skills-based volunteerism, focused on partnerships with leading nonprofits in sustainability and STEM (Science, Technology, Engineering and Math). As a founding sponsor of *FIRST* robotics, our employees have dedicated thousands of hours, mentoring more than 50,000 students who aspire to be the next generation

of engineers, scientists and advanced manufacturing professionals. Earlier this year we announced a multi-year partnership with Girls Who Code, a nonprofit organization that seeks to close the gender gap in technology. Our partnership includes financial support, professional mentoring, and the hosting of select Girls Who Code programs at our facilities. In 2018, we supported more than 6,000 civic, cultural, economic, and social welfare organizations around the world, and since 2012, we have invested more than $250 million in our communities.

In the aerospace industry, we like to say that "our bets are generational"—that is how long it takes to determine if our investment paid off. Some of our social responsibility bets have immediate payoffs, while many others are generational: Whether we are investing in technologies to improve air quality or in the education of a child to spark her love of science, those returns will be down the road, but we know they will inevitably enrich our communities, our country, and our planet. This Corporate Responsibility Report highlights some of those efforts. I find them inspiring and I hope you do too.

Gregory J. Hayes
Chairman & Chief Executive Officer

About United Technologies

United Technologies is a global leader in the aerospace and building industries. Our aerospace businesses—Pratt & Whitney and Collins Aerospace—are redefining the future of flight with next-generation aircraft engines and integrated systems and components. Our commercial businesses—Carrier and Otis—are pioneering more intelligent and sustainable building solutions that help keep people safe, comfortable, productive and on the move.

Our company was founded by some of the world's greatest inventors and innovators—like Elisha Otis, Willis Carrier, Frederick Rentschler, Arthur Collins and Thomas Hamilton—who created and integrated modern-day technologies that today still define the elevator, air-conditioning and aerospace industries.

Through the imagination and spirit of our 240,000 employees we continue our founders' legacy of innovation, making the impossible possible, and in the process, delivering unsurpassed value to our customers.

Our Businesses

Collins Aerospace is one of the world's largest suppliers of technologically advanced solutions for commercial, military and space platforms.

Carrier is a leading global provider of innovative HVAC, refrigeration, fire, security and building automation technologies.

Pratt & Whitney is a world leader in the design, manufacture and service of aircraft and helicopter engines, and auxiliary power units.
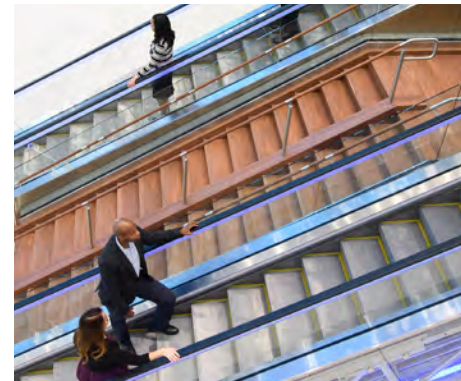
Otis is the world's leading manufacturer and maintainer of elevators, escalators and moving walkways.

2018

240,000
employees

$66.5B
net sales

$7.61*
adjusted diluted earnings per common share from continuing operations

$4B
total company- and customer-funded R&D spending

*See page 77 for additional information regarding these non-GAAP measures.

Highlights

Our People

We are committed to creating an inclusive environment where diversity of thought and perspectives amplify the skills and experience of our people.

Diversity is reflected in our Board of Directors, which is comprised of 38 percent women and people of color. And women hold nearly 30 percent of senior leadership roles at United Technologies today. Our goal is to increase this to 50 percent by 2030.

We believe we have a responsibility to help prepare our employees for the jobs of the future, which is why we are one of the largest sponsors of employee education in the United States and across the globe.

United Technologies has invested over $1.3 billion in employee higher education programs, enabling 45,000 employees, studying in over 60 countries, to earn a degree.[1]

Across the United States, we support more than 30 work-force training pro-grams in collaboration with community colleges and technical schools, and offer and support appren-ticeship programs in Europe, Asia, Latin America and North America.

Our Operations

Our ACE—Achieving Competitive Excellence —operating system fosters a culture of continuous improve-ment by using indus-try-leading methods and tools focused on improving quality, on-time delivery and customer satisfaction.

After two decades at the forefront of workplace environ-ment, health and safety protection, we continue to go above and beyond what is required or expected in each of our global manufac-turing facilities.

Since 1997, we have reduced our record-able incident rates by 90 percent.

Since 1997, we also have reduced our greenhouse gas emissions by 33 percent and water consumption by 62 percent while nearly tripling our sales.

United Technologies is committed to reduc-ing its greenhouse gas emissions 3 percent annually, through 2025, which is in keeping with the Paris Accord objective of limiting the global average temperature increase to 2°C.

1 40,000 degrees earned to date

Highlights

Our Communities

United Technologies is committed to being an active force for good in the communities where our employees live and work.

In 2018, we helped sponsor more than 6,000 civic, cultural, economic and social welfare organizations around the world.

Our charitable-giving programs have invested more than $250 million in local communities globally since 2012, an amount that includes more than $20 million in employee donations and matching company grants.

We prioritize skills-based volunteerism and financial support for leading science, technology, engineering and mathematics (STEM) initiatives,

including *FIRST* (For Inspiration and Recognition of Science & Technology), Girls Who Code, NAF and the National Invention Convention and Entrepreneurship Expo.

Our Products

United Technologies believes that many of society's biggest challenges can be tackled through innovative thinking, design and engineering that integrate technological advancement with sustainable development.

Pratt & Whitney's Geared Turbofan (GTF) jet engine has transformed environmental performance in aviation, reducing fuel burn by 16 percent, NO_X emissions by 50 percent[2] and the noise footprint by 75 percent.

Otis' Gen2 elevator with ReGen drive technology reduces energy consumption by up to 75 percent.[3]

Collins Aerospace's SmartProbe Air Data Systems uses advanced technologies to minimize the need for component parts such as pneumatic pressure lines, resulting in weight savings of up to 50 percent,[4] thereby reducing fuel burn.

Carrier designed and manufactures the world's most efficient screw chiller, which is 42 percent more efficient than the industry standard.[5]

2 To the regulatory standard
3 Compared to conventional systems without regenerative technology
4 When compared to traditional systems
5 Among electric-driven, water-cooled chillers as measured by Integrated Part Load Value conditions based on ASHRAE 90.1 2010 minimum requirement

Stakeholder Engagement

We are a business that serves and supports many important stakeholders. Engaging with each and understanding their expectations, needs and priorities helps inform our efforts. Here's our approach:

	How We Engage
Employees	We encourage feedback from our employees through regular Pulse surveys, town hall meetings, development conversations, online employee portals and through confidential channels where employees can raise sensitive issues, seek guidance and report misconduct.
Customers	We seek customer input through continuous dialogue, product and service training programs, dealer and distributor councils and a variety of customer surveys. We then use that information to improve our products, services and operations.
Investors	We believe in transparent and open communications with investors. In recent years, these engagements have improved our corporate governance practices, increased shareholder rights, changed our Board's composition and improved the design of our executive compensation program and disclosure. In 2018, UTC engaged directly with institutional investors holding more than 350 million shares, which represents over 40 percent of our shares outstanding.
Suppliers	We actively collaborate with our global network of suppliers. We are members of several industry organizations, attend national and local conferences to meet with new and existing suppliers and encourage suppliers to participate in our Supplier Gold program to improve their operating performance and growth.
Government	Our government relations initiatives educate and inform officials on a range of public policy issues important to our businesses, and we annually disclose federal and state lobbying activities and expenditures.
Non-Governmental Organizations (NGOs)	We support global STEM education, providing more than 350 grants annually, including sponsorship of the National Invention Convention and Entrepreneurship Expo and a 20-year partnership with *FIRST*.

Operating Responsibly

At United Technologies it's not just what we do, but how we do it.

We are committed to strong corporate governance practices that are designed to maintain high standards of oversight, accountability, integrity and ethics, while promoting long-term growth in shareowner value.

These standards are reflected in our Code of Ethics, Governance Guidelines, risk management processes, and in our commitment to transparent financial reporting and strong internal controls. Additionally, our governance structure enables independent, experienced and accomplished directors to provide advice, insight and oversight of our business.

Our Code of Ethics: United by Values

Each of our employees is united by our core values: Trust, Integrity, Excellence, Innovation and Respect. We maintain relationships based on Trust by relating to others with openness, transparency and empathy. We act with Integrity in everything we do because we put honesty, accountability and ethics first. We deliver on Excellence by the merits of our products and services. We Innovate and constantly seek to develop, improve and sustainably grow. We Respect and treat others the way we want to be treated.

Our Code of Ethics applies everywhere we do business. The integrity, reputation and success of UTC ultimately depends not only upon the individual actions of our employees, but on the actions of the many parties with whom we do business. We make the United Technologies Code of Ethics readily accessible to all employees and stakeholders on our ethics microsite.
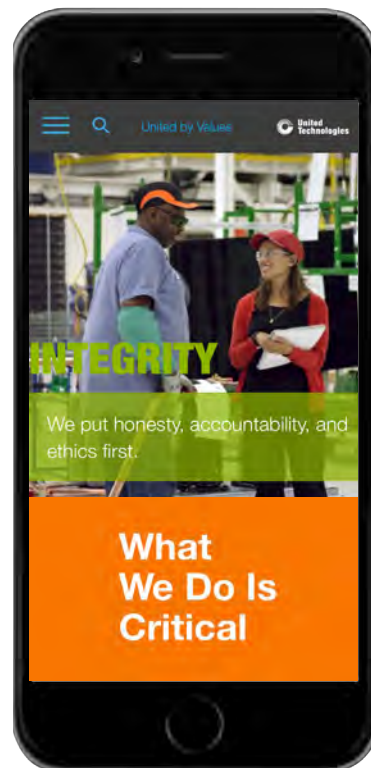
Competing Vigorously and Legally

Competition fosters better products and services, helping us to be more efficient and innovative, and creating greater value for our customers. We comply with all competition laws wherever we do business, and any anti-competitive activities are considered a clear violation of our core values. We compete vigorously and legally, not only because it's good for our business and reputation, but because it's the right thing to do.

Protecting Human Rights

We are committed to responsible citizenship and engaging with others to promote better working conditions for all. Our vast global footprint enables us to make our mark in the fight for safer working conditions and equal opportunity around the world. United Technologies takes robust and thorough measures to protect workers at its facilities. We also promote positive change by encouraging our business partners and communities to respect human rights. Therefore, we honor our core values by engaging with those who share our commitment to helping keep people safe, comfortable, productive and on the move.

Respecting Data Privacy

United Technologies respects the privacy of the people from whom we collect and process personal information. We have a comprehensive data privacy compliance program that aims to implement appropriate controls on what personal information we collect and process and how we safeguard it. Our approach involves:

- Following applicable data privacy laws.
- Completing privacy impact assessments for new and modified tools, service providers, and products and services that involve the collection or processing of personal information.
- Performing an annual self-assessment of our privacy compliance program, involving hundreds of United Technologies' entities.
- Using appropriate security safeguards.
- Adopting detailed policies and Binding Corporate Rules, which are rules for data privacy compliance approved by European regulators.

Strengthening Cybersecurity

Cybersecurity is a significant part of our digital business strategy. As a company, we are committed to developing an intelligence-led cyber defense strategy to mitigate, detect and respond to attacks as appropriate. United Technologies' Board of Directors reviews our cybersecurity program on at least an annual basis.

We engage industry experts to conduct regular assessments to validate defensive measures and employ a comprehensive risk management framework that enables effective escalation and management.

Similarly for product security, we collaborate with industry experts to conduct cybersecurity assessments on key products across our portfolio. We established Product Cybersecurity Incident Response teams, and manage and solicit third-party disclosure of vulnerabilities. This includes understanding the current state, analyzing risks to the business, crafting a path forward and blueprinting a new way of working.

Ensuring Product Safety

We earn our customers' trust by delivering the safest, highest-quality products and services possible. Each business unit implements our product safety policy by:

- Appointing a product safety manager and a product safety best practices team.
- Developing a product safety policy and product safety risk management system, as well as product safety assurance practices and safety promotion activities for harmful incidents.
- Investigating and reporting any safety incidents involving any product.
- Creating a product-related incident review board.
- Holding periodic meetings to share product safety best practices and procedures.

Additionally, at an enterprise level we've established an incident review board, comprised of senior executives, that reviews certain product-related incidents along with the results of the respective business unit's investigation. We also periodically establish Product Safety Review Committees made up of impartial, external safety professionals to assess business-level product-safety systems and related processes.

Advancing Product Quality

Our Product Quality policies and programs set the standards, metrics and processes designed to ensure that products and services meet our commitments to customers.

Our Product Quality policy requires that our aerospace businesses comply with the following quality standards established for the industry:

- ISO9001
- AS/EN/JISQ 9100 (Aerospace Quality Management System (QMS))
- AS/EN/JISQ 9110 (Aerospace Maintenance Organization QMS)
- AS/EN/JISQ 9120 (Aerospace Distributors QMS)
- And other standards as required by customer, industry or local regulation.

Our commercial businesses are required to comply with:

- ISO9001
- And other standards as required by customer, industry or local regulation.

Annually, our vice presidents of quality are required to certify each business unit's quality management system. In addition to customer and regulatory audits, we perform rigorous self and independent internal audits to maintain a healthy culture of quality across the business, including learning and best practices.

Pratt & Whitney is applying the same superior level of innovation it used in designing its game-changing GTF engine to develop virtual reality customer training tools to advance learning for airline mechanics worldwide.

ACE—Achieving Competitive Excellence

ACE is the foundation of our operational performance and has been for over 20 years. ACE draws on best practices to drive customer excellence. It supports our entire value stream from developing and producing new products to finding better ways to serve our customers. Comprised of the daily interaction of three elements—culture, tools and competency—ACE is focused on improving quality, ensuring on-time delivery, supporting

highly engaged employees working in a safe environment and providing best-in-class financial returns.

Employees can develop their ACE competency by taking part in our internal ACE certification program. From basic awareness training to achieving a certification (e.g. ACE associate, practitioner and master) employees learn about continuous improvement and how to apply their learnings to drive business and process improvements.

ACE Operating System

Suppliers

Our suppliers are critical to our success. To help ensure that we provide superior products and services in a responsible manner, we require our suppliers to meet our expectations for ethical, environmental and social performance as well as comply with our Supplier Code of Conduct. The Code of Conduct outlines what we expect from each of our product and service suppliers and aligns with the expectations we maintain for our own directors, officers, employees and representatives.

Specific to our aerospace businesses, suppliers must adhere to certain quality requirements as set out in our Aerospace Supplier Quality document. This document defines supplier quality requirements for manufacturing organizations and applies to aerospace suppliers and all members of their supply chains who provide product, material, processes and services.

Supplier Gold Program

Supplier performance is an essential element of United Technologies' strategy for developing a world-class, integrated supply chain. Our Supplier Gold program is a key component of sustained supplier performance. Achieving Supplier Gold is an important distinction that brings

suppliers considerable benefits and recognition. First, suppliers see substantial improvements in their operating performance, enabling further growth. Second, suppliers gain recognition across our company as our Supply Management Council, which is comprised of the business unit vice presidents of Supply Management, is engaged in the Gold certification process. Supplier Gold is complementary to a supplier's current operating program and is aligned with our ACE operating system.

Conflict Minerals

Our Conflict Mineral Policy sets forth our preference to source tantalum, tin, tungsten and gold originating in the Democratic Republic of the Congo region from a smelter or refiner validated as conflict-free by an independent third party. We support industry-wide initiatives that raise awareness for responsible sourcing of conflict minerals and support the development of conflict-free sourcing, such as the Responsible Minerals Initiative (RMI). We expect our suppliers to comply with all applicable laws and regulations, and assist us in fulfilling our obligations.

24%

of supplier expenditures in the United States spent with suppliers in diverse categories

Supplier Diversity

Our Supplier Diversity Program helps us build and maintain a diverse supplier base that drives innovation throughout our value chain. Through it, we establish relationships with qualified suppliers in more than a dozen diverse categories, creating value for our company, our customers and our communities. In 2018, we spent more than $4 billion with first-tier suppliers in all diverse categories, representing approximately 24 percent of our supplier expenditures in the United States. In addition, we've established relationships with regional and national organizations, broadening our access to diverse suppliers and enabling us to keep up with the latest industry trends.

We maintain relationships with:

The Women's Business Enterprise National Council

Center for Women & Enterprise

Greater New England Minority Development Council

National Veterans Small Business Engagement

National Minority Supplier Development Council

National LGBT Chamber of Commerce

Recognizing Suppliers for Commitment to Sustainability

Environmental considerations are also part of our supplier responsibility programs. In 2018, Pratt & Whitney awarded its supplier, Praxair Surface Technologies, a subsidiary of Praxair Inc., its Supplier Sustainability Award. This annual award recognizes a supplier that demonstrates exemplary commitment to environmental sustainability.

Pratt & Whitney is proud to work with companies like Praxair, which demonstrates its commitment to sustainability through cross-cutting initiatives that include building more energy-efficient plants, reducing emissions and expanding recycling programs. Praxair also offers alternative, sustainable solutions to chrome, cadmium and other materials, and provides alternative coating solutions that decrease energy consumption and reduce nitrogen oxide (NO_x) emissions.

Pratt & Whitney's Lisa Szewczul, vice president, Environment, Health & Safety (left) and Ruben Harris, vice president, Global Supply Chain (right) present Dean Hackett, vice president, Americas, Praxair Surface Technologies (center) the company's 2018 Supplier Sustainability Award.

Innovating to Advance Society

The world's population is expected to grow nearly 30 percent in the next 30 years—approaching 10 billion by 2050—with nearly 70 percent living in urban centers.

This urban migration will result in unique challenges for cities as they become more densely populated, straining infrastructure and requiring buildings to be more expansive, intelligent and connected. Adding to this complexity will be an unprecedented growth in aerospace, because more people will be flying commercially than ever before.

United Technologies believes that many of society's biggest challenges can be tackled through intelligent design and engineering that integrate technological advancement with sustainable development. As one of the world's largest providers of building technologies, we offer an array of energy-efficient building solutions and services that lower costs and are environmentally responsible. And as a leading aerospace company, we have designed and manufactured technologies that help drive sustainability through more intelligent jet engines, advanced aviation air data management systems and space exploration products.

Carrier

The following are some examples of how our companies bring sustainable innovation to life.

At Carrier, we were leaders in the phase-out of ozone-depleting refrigerants and remain focused on delivering energy-efficient fire safety, security, building automation, refrigeration and HVAC systems and services for our customers. As we continue to invest in research and development, we are applying the newest technological innovations to create ever more sustainable solutions that surpass the already stringent environmental performance targets designed into our products.

The Carrier AquaEdge 23XRV chiller is the world's leading efficiency screw chiller, 42 percent more efficient than the industry standard.*

Carrier's Infinity Controls, combined with its energy-efficient geothermal solutions, are 45 percent more energy efficient than standard residential heating and cooling systems.

Marioff's HI-FOG water mist systems use up to 90 percent less water than traditional sprinkler systems.

Carrier Transicold's NaturaLINE container refrigeration unit was the first in the world providing highly efficient refrigeration using CO_2, reducing emissions by up to 28 percent compared with previous equipment.

*Among electric-driven, water-cooled chillers as measured by Integrated Part Load Value conditions based on ASHRAE 90.1 2010 minimum requirement.

Two Carrier AquaEdge 23XRV Chillers at the UTC Center for Intelligent Buildings, Palm Beach Gardens, Florida.

Meet the UTC Center for Intelligent Buildings

The UTC Center for Intelligent Buildings is more than a high-tech, modern workspace. It's a living showcase of what's possible when advanced building technologies are implemented intelligently and integrated to increase efficiency, protect people and property, and enhance the occupant experience. With features like a state-of-the-art customer experience center, the building reveals the unseen, taking technologies that are critical to efficient, comfortable, productive, safe and secure environments—but commonly hidden in basements, closets and on rooftops—and making them visible and interactive.

The Center was designed to be among the most sustainable and efficient buildings in the world and achieved LEED v4 Platinum certification from the U.S. Green Building Council. It provides indoor air quality conditions that, according to Harvard's The Impact of Green Buildings on Cognitive Function (COGfx) studies, can double occupant decision-making performance while meeting the highest standards for green design and operation. In addition to efficient and environmentally responsible technologies, the UTC Center for Intelligent Buildings was designed to achieve a 60 percent reduction in energy use, 60 percent reduction in CO_2 emissions, a 36 percent reduction in indoor water use through the installation of efficient fixtures—like faucets, toilets, and showers—and 100 percent reduction in landscape water irrigation.

Otis

As the world's leading manufacturer and maintainer of people-moving products—the elevators, escalators and moving walkways that transport an estimated 2 billion people a day—we're focused on developing bold new solutions to meet the needs of our passengers and customers in the digital age.

We've been pioneers in developing sustainable technologies like the ReGen drive. Now standard on our Gen2 and SkyRise elevators, the ReGen drive captures energy that would otherwise be wasted as heat and converts it into reusable energy for other building systems. Another Otis innovation, our CompassPlus destination dispatching technology, saves energy by moving some elevators to standby mode when traffic is light. Our new Otis ONE digital service platform uses sensors to collect real-time performance data that cloud-based algorithms analyze to help predict and prevent shutdowns.

Otis' Gen2 elevator with ReGen drive is smaller and capable of reducing overall elevator energy consumption by 75 percent under normal operation, compared to conventional geared machines with non-regenerative drives.

The CompassPlus destination management system directs passengers to the elevator that will get them to their destination significantly faster than conventional dispatching systems. The system conserves energy by moving some elevators to standby mode when traffic is light.

The Otis Gen2 elevator at the Connecticut Science Center, Hartford, Connecticut.

Modernizing the Willis Tower

Chicago's Willis Tower, one of the world's tallest and most famous buildings, turned to Otis to modernize its elevators as part of a larger renovation project. The elevator upgrade will reduce travel time for the building's tenants and visitors by up to 30 percent during peak travel times. The Willis Tower elevator system makes more than 46,000 daily trips and serves an estimated 5.8 million people each year.

Otis is upgrading the building's elevator cabs to SkyRise units using the CompassPlus destination management system. SkyRise elevators are among the world's most advanced high-rise elevator systems, featuring stylish design, ultra-quiet operation, smart technology and energy-efficient components. The CompassPlus system organizes traffic flow and provides a personalized passenger experience—sorting passengers into each elevator based on their destinations to get people where they are going significantly faster than conventional methods.

46,000
elevator trips daily

5.8M
served each year

Collins Aerospace Systems

At Collins Aerospace, our engineering and design teams work across our broad portfolio to incorporate the latest innovative materials and technologies to make the skies and spaces we touch smarter, safer and more sustainable. The breadth of our technologies provides us with a unique, holistic view of aircraft system integration opportunities, resulting in improved fuel efficiency and increased reliability.

The SmartProbe Air Data System from Collins Aerospace incorporates its own internal computer to calculate the critical air data parameters needed for aircraft flight control, thereby eliminating the need for pneumatic pressure lines, as well as considerable electrical wiring and sensors. The result is weight savings of up to 50 percent—and related fuel burn savings—when compared with traditional systems.

Collins Aerospace's next generation nacelle system features a 360-degree acoustically smooth inlet that helps to optimize the noise footprint of aircraft engines.

A Collins Aerospace reconfigurable flight deck display test platform, which enables tests to be conducted in an environment similar to that of actual flight before a system is delivered to the customer.

Innovating a New Chapter in Aviation

United Technologies is innovating with hybrid-electric technology to reduce fuel burn in the future of regional flight. The company recently shared its plans to design and build a hybrid electric X-plane that is expected to take flight in 2022. The X-plane is expected to yield industry-leading total fuel savings of at least 30 percent during an hour-long mission—helped by advances in engine technology as well as the use of electrification. The plane is expected to be a technology demonstrator

that pushes the boundaries of aerospace and a product demonstrator that showcases the economic viability of hybrid-electric propulsion. Project 804 is being led by United Technologies'

advanced projects group in partnership with Collins Aerospace and Pratt & Whitney. With Project 804, United Technologies aims to pioneer a new chapter in aviation.
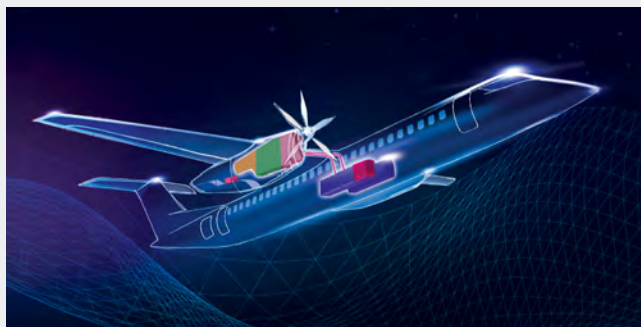
## Advancing Sustainability to Mars and Back

For decades, the approach to managing astronaut trash has involved temporarily storing and ultimately disposing of the trash either by return to Earth or incineration during reentry in a disposable supply vehicle.

As NASA pushes the boundaries of human space exploration through longer missions to the Moon and Mars, these approaches will no longer be feasible.

To solve this challenge, Collins Aerospace has proposed an integrated Trash Compacting and

Processing System designed to handle astronaut trash in situ. The proposed design would reduce trash volume by 93 percent, turning two cubic feet of trash—roughly what the crew on the International Space Station generates each day—into a 9-by-9-by-1.75-inch disc. That's the equivalent of reducing something roughly the size of a beer keg to a small pizza, while also minimizing the loss of cabin air and maximizing the amount of water recovered during the compacting process.
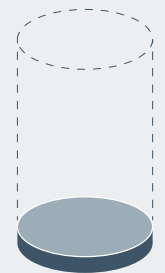
-93%
volume
space trash

Pratt & Whitney

Pratt & Whitney, the manufacturer of one of the world's most fuel-efficient jet engines, is committed to helping reduce the impact of air travel on climate change by providing customers with the most environmentally responsible products and services. To do this, we target sustainable innovation across our value chain—in suppliers' practices, through continuous improvement on our factory floors and in flight, with engines that power some of the most efficient, connected aircraft on the market.

Since entering into service in early 2016, **the GTF engine family** has delivered on its promise to reduce fuel burn by 16 to 20 percent, and to significantly reduce regulated emissions and noise footprint. Through 2018, Pratt & Whitney customers have saved an estimated 75 million gallons of fuel worth more than $135 million. These fuel savings have resulted in avoiding 720,000 metric tons of carbon dioxide emissions, which are equivalent to the carbon dioxide emissions from the energy use of approximately 86,000 homes in the United States for one year.

Pratt & Whitney has industry-leading expertise in the evaluation and approval of **sustainable aviation fuels** (SAF) through its participation in the ASTM International committee responsible for such approvals. More than 180,000 commercial flights have used SAF blends to date. Today, all Pratt & Whitney jet engine types can operate efficiently with these approved SAF blends.

Embraer's E190-E2 aircraft, which is also powered by the Pratt & Whitney GTF engine, entered service in April 2018 with Norway-based Widerøe.

Delivering Data from Air to the Ground

Pratt & Whitney is investing in data acquisition and predictive analytics tools to help reduce operational disruptions, increase engine availability and optimize engine performance and fuel burn. Our ADEM (Advanced Diagnostics and Engine Monitoring) service and eFAST (enhanced Flight Data Acquisition, Storage and Transmission) ecosystem are two examples of capabilities and investment under our EngineWise portfolio of services.

ADEM is an engine health management service that employs a suite of web-enabled software tools to provide expert analysis of engine health data. The eFAST ecosystem enables next-generation engine health management capabilities and includes a secured acquisition, storage and transmission infrastructure that can access and record aircraft and engine full-flight data, generate reports based on recorded data and offloading data, and report to a remote ground station.

Investing in Our People

At the heart of United Technologies are our employees—approximately 240,000 purpose-driven people united by an innovative, learning culture. Ours is a company of innovators, problem-solvers and—quite simply—remarkable people.

The current pace of change is unprecedented. Urbanization and digital acceleration are changing our world—and opening up new opportunities. Together, we can create an extraordinary future by shaping our careers, our workplace, our industries and our world.

The success of United Technologies depends on our ability to continue to attract, develop, retain and engage the very best talent. That's why we're committed to fostering a diverse, inclusive workforce. It's not just the right thing to do, it's imperative for a growing global business.

Diversity and Inclusion

We begin with a commitment to creating an environment where every employee can be themselves and share ideas openly. This includes focusing on advancing gender parity, encouraging employee-led engagement and enhancing opportunities for professionals who want to return to work after time away.

Advancing Gender Parity

We believe women must have opportunities to participate equally in leadership positions, which is why we joined the Paradigm for Parity (P4P) coalition in 2017. Today, 30 percent of senior leadership roles at United Technologies are held by women and our goal is to increase this representation to 50 percent by 2030.

Global Women Executives

2030 Goal	50%
2018	30%
2017	29%
2016	28.8%
2015	24.7%
2014	22.5%
2013	20.5%

U.S. Professionals of Color

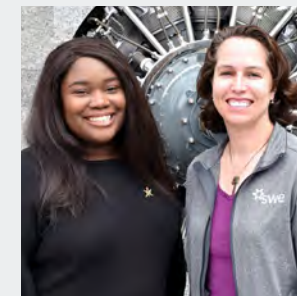|	
2018	18.3%
2017	17.2%
2016	14.5%
2015	12.9%
2014	12.3%
2013	11.3%

Employee-led Engagement

We encourage our employees to join one of the many Employee Resource Groups (ERGs) sponsored by United Technologies. These are employee-led networks that help foster inclusion and employee engagement. Our ERGs support nine global communities—African American, Asian American, Disability, Generational, Hispanic American, LGBT Pride, Military Veterans, Professional and Women—engaging approximately 5,000 members across 115 chapters to promote advocacy, professional development, education, mentoring and community outreach.

115
Employee Resource Group chapters open to global employees

Otis Brazil elevates awareness of the LGBTQ population to create an inclusive work environment for all.

Women Leading the Way

United Technologies is committed to increasing the number of women leaders across its global businesses. We are proud that in 2018 two prominent industry organizations for professional engineers had United Technologies' women at the helm, both Pratt & Whitney employees. Niasia Williams, a Pratt & Whitney engineer, recently took on the leadership of the National Society of Black Engineers, and Jonna Gerken, a Pratt & Whitney project manager, served as president of the Society of Women Engineers.

The two organizations help their members and constituents advance in the engineering profession through advocacy, education and networking. During her time at Pratt & Whitney, Gerken has observed a dramatic increase in the number of women in entry-level and upper-

Niasia Williams, a Pratt & Whitney engineer, leads the National Society of Black Engineers, and Jonna Gerken, a Pratt & Whitney project manager, served as president of the Society of Women Engineers.

management positions, but says there is still work to do. The audience, Williams notes, is not only youth, but also women and minorities who may not have worked with or seen a female or an African American leader in technology. "Being an example for people will make it that much easier for the next generation entering the profession to feel comfortable," she says.

30% of
the Directors on United Technologies' Board are women

Talent Attraction and Retention

As a leader in innovation, we are intent on attracting the very best talent from across the globe.

Students and Recent Graduates

Through innovative partnerships with leading universities and research centers, we equip the workforce of the future with the know-how to solve global challenges and change the world for the better. We offer co-op and internship opportunities across our business units at the graduate and undergraduate levels, along with two-year rotational leadership programs in finance, engineering, digital technology, human resources and other disciplines.

Opportunities to Re-enter the Workforce

Our Re-Empower Program helps professionals bring their knowledge, experience and creativity back into the workforce after a voluntary career break. This 16-week program, launched in 2017, gives returning workers paid, on-the-job experience where they can develop personalized success plans and receive career coaching. After completing the program, successful participants are encouraged to apply for full-time employment.

Military Servicemen and Women

We value the unique experience military professionals bring to the workplace and encourage veterans who are transitioning from active duty to a civilian career, reserve members and military spouses to consider a range of career paths at United Technologies. This includes roles in engineering, operations, business development, finance and other areas.

In 2018, United Technologies joined the Military Spouse Employment Partnership (MSEP), a targeted recruitment and employment solution specifically designed to support military spouses. Through this platform, we seek to recruit, develop and retain U.S. military spouses by providing access to career opportunities, as well as ongoing support and resources.

Experienced Professionals

In 2018, United Technologies hired nearly 10,000 professionals globally. Three-quarters of these professionals brought five years of experience or more to their roles to help us solve some of society's most pressing challenges involving aerospace and commercial building.

nearly

10,000

professionals hired globally

86%

job placement rate upon completion of Re-Empower Program

Returning to work after an absence of two or more years can seem daunting. United Technologies' Re-Empower Program is designed specifically to help with this transition and bring experienced professionals back to the workforce.

Pratt & Whitney's UTC-4-VETS Employee Resource Group with Lieutenant Colonel Peter M. Rembetsy, United States Air Force, at a recent event honoring his service to our country. Lt. Col. Rembetsy flew the B-24 Liberator, powered by Pratt & Whitney R-1830 Twin Wasp Engines.

Creating a Culture of Lifelong Learning

United Technologies invests $100 million annually on learning and development programs that span the full lifecycle of a career, from talent attraction and retention to retirement.

Through these efforts we support and equip current and future employees with the education, skills training and support needed to adapt and thrive in an ever-changing work environment. We recognize that while no company can guarantee lifetime employment, we can provide our employees with lifelong learning opportunities that grow their capabilities and position them for greater opportunities within United Technologies or elsewhere.

Employee Scholar Program

We offer one of the most comprehensive and generous company-sponsored employee education programs in the world. Available to our global workforce, United Technologies' Employee Scholar Program (ESP) covers the cost of a student's tuition, academic fees and books at approved universities. Since we launched ESP more than two decades ago, we've invested more than $1.3 billion to advance our employees' formal education. And that investment has paid off. More than 40,000 degrees have been earned by employees in more than 60 countries since 1996. Currently, there are more than 6,000 employees enrolled in the ESP. We're building on our success by ensuring that the degrees pursued are relevant to employment opportunities at United Technologies so that our employees can advance and take on new challenges within our company.

Workforce Training and Development

Continuous learning is a core attribute of our lifelong learning philosophy. Each year our employees collectively complete more than 2 million hours of training through internal training programs, web-based eLearning, virtual classrooms, external seminars, apprenticeships and partnerships with community colleges. Across the United States, we support more than 30 workforce training programs in collaboration with community colleges and technical schools, and offer and support apprenticeship programs in Europe, Asia, Latin America and North America.

40,000+
degrees earned
since 1996

$1.3B+
invested
since 1996

$100M
invested
annually

6,000+
employees
currently enrolled

60+
countries with
employee
participation
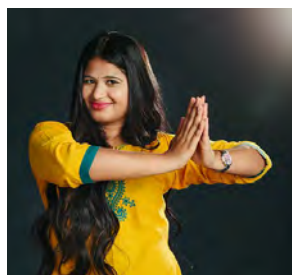
Professional Growth

Our learning initiatives extend to those in professional roles too. Our Learning, Development & Engagement programs offer high-achieving professionals job rotation opportunities, supervisor and manager training, mentoring, advanced certificate programs, coaching and more. Employees can advance their careers through opportunities across business units, functional disciplines and our global operations.

We also partner with leading educational institutions like the Darden School of Business at the University of Virginia and INSEAD, one of the world's leading business schools, to create development programs that shape the next generation of senior leaders.

Employee Experience and Engagement

We understand that an empowered, motivated workforce is fundamental to our continued business success. That is why we utilize a wealth of communication channels to foster employee engagement. Employees at United Technologies will have a variety of technology options with which to hear from, and engage with, their leaders and each other. Whether it's making our intranet portals more engaging, launching new team-based collaboration platforms, communicating more through social channels or increasing the frequency of in-person visits and town halls—our goal is to enable open, transparent and frequent communications. We believe our employees need

to be fully informed about our company's performance, understand how they contribute to our success and have an active voice in how we operate as a company.

Another way that we listen to our employees is through Pulse surveys, which we issue three times per year globally. These surveys cover a range of topics from employee understanding of our business strategy to workplace culture topics and job satisfaction. The results are shared company-wide and discussed at the department level, which enables areas of strength to be amplified and areas of concern to be addressed, tracked and measured for future progress.
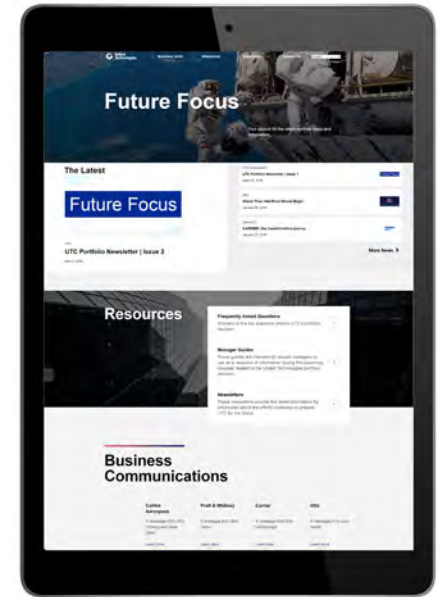
Workforce Development in Columbus, Georgia

Since 2009, Pratt & Whitney has collaborated with Columbus Technical College and three local school districts to establish a track within the Certified Manufacturing Specialist program. This provides training to high school seniors, enabling them to participate in paid apprenticeships at

Pratt & Whitney's Columbus facility. Nearly 50 percent of high school seniors who completed their internship at Pratt & Whitney have been hired.

Nearly
50%
of participants hired

In 2018, United Technologies announced it would separate into three independent companies. To foster transparency with our employees during this transformation, we created a dedicated employee microsite that provides the latest company news and information on the separation activities and provides a place to ask questions and make recommendations.

Leading in Environment, Health & Safety

United Technologies has long recognized the value of sustainable practices. Since 1992, we have implemented sustainability initiatives across our businesses designed to reduce the impact of our activities on the environment and strengthen the economic health of future generations.

Around the world, our manufacturing facilities and service operations strive for continuous improvement by resetting workplace Environment, Health and Safety (EH&S) performance goals every five years.

Our investments have paid off with improvements across three core program areas: workplace safety, compliance and environment. We have some of the best workplace safety rates among our peers and other multinational manufacturing companies.

Our EH&S Management System and ongoing employee health and safety initiatives help ensure our compliance with applicable laws and regulations. And since 1997, we've reduced the environmental footprint of our operations by cutting our annual water use by more than 1 billion gallons and our greenhouse gas (GHG) emissions by more than 1 million metric tons. We are committed to three environment, health and safety principles:

Workplace safety: We will not rest until our workplaces and workers are free from risk of injury.

Compliance: We will comply with all EH&S laws and regulations.

Environment: We will work continuously to reduce our impact on the environment and global climate.

Our Management System

Our EH&S management system defines the policies, procedures and best management practices that inform our daily operational requirements and provides a framework for continuous improvement through integrated planning, performance and measurement.

Our EH&S organization, governance and performance expectations are consistent with ISO 14001 and other global EH&S program standards, including:

- Management and Board level responsibility for environmental issues.
- Organizational structure integrating EH&S management throughout the enterprise.
- Compliance with all environmental, health and safety regulations.
- A formalized EH&S risk management system.

- Data and document quality management, including data collection, performance measurement and progress reporting against goals.
- Continuous improvement in the efficient use of natural resources and the reduction of emissions, releases and waste.
- Employee training.

Program governance begins at the local site level and flows up to the top, where our Chief Executive Officer and Board of Directors oversee program performance against established targets and provide strategic direction for new initiatives.
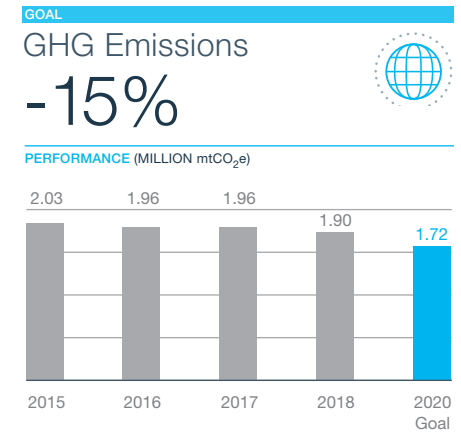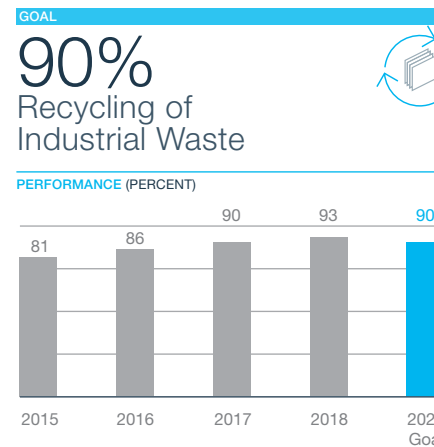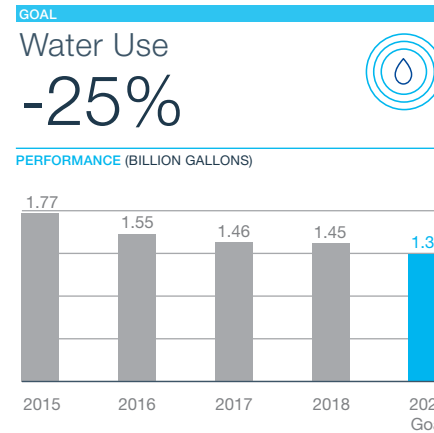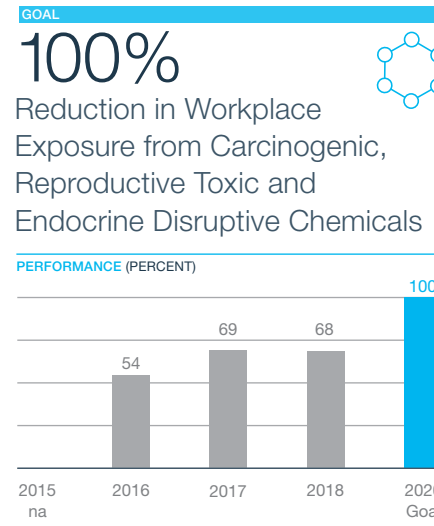

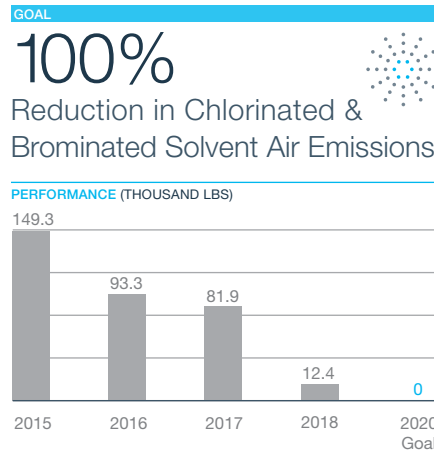Otis Service Center, Bloomfield, Connecticut.

Collins Aerospace, Foley, Alabama.

EH&S Goals and Performance

United Technologies uses a formal enterprise risk management (ERM) process and structured EH&S materiality reviews to identify issues that can impact our business operations and the local or global environment. One way that we target improvements in these areas is through our EH&S goals, which we reestablish every five years.

Developed in collaboration with our business units, and reviewed and approved by senior management and our Board of Directors, our goals focus on areas where we can make meaningful improvements and inspire our employees to build on our more than 20-year EH&S legacy. Our goals measure progress in absolute terms against a baseline year and are not adjusted for organic increases or decreases in production.*

GOAL
Ergonomic Risks
-50%

PERFORMANCE (PERCENT)

2015 na | 2016: 26/14 | 2017: 48/27 | 2018: 58/38 | 2020 Goal: 50/50

high   med

GOAL
100%
Reduction in Chlorinated & Brominated Solvent Air Emissions

PERFORMANCE (THOUSAND LBS)

2015: 149.3 | 2016: 93.3 | 2017: 81.9 | 2018: 12.4 | 2020 Goal: 0

GOAL
Hazardous Waste
-10%

PERFORMANCE (MILLION LBS)

2015: 59.9 | 2016: 59.5 | 2017: 58.3 | 2018: 55.4 | 2020 Goal: 54.3

GOAL
100%
Reduction in Workplace Exposure from Carcinogenic, Reproductive Toxic and Endocrine Disruptive Chemicals

PERFORMANCE (PERCENT)

2015 na | 2016: 54 | 2017: 69 | 2018: 68 | 2020 Goal: 100

GOAL
Water Use
-25%

PERFORMANCE (BILLION GALLONS)

2015: 1.77 | 2016: 1.55 | 2017: 1.46 | 2018: 1.45 | 2020 Goal: 1.33

GOAL
90%
Recycling of Industrial Waste

PERFORMANCE (PERCENT)

2015: 81 | 2016: 86 | 2017: 90 | 2018: 93 | 2020 Goal: 90

GOAL
GHG Emissions
-15%

PERFORMANCE (MILLION mtCO$_2$e)

2015: 2.03 | 2016: 1.96 | 2017: 1.96 | 2018: 1.90 | 2020 Goal: 1.72

GOAL
100%
Implementation of Water Best Management Practices

PERFORMANCE (PERCENT)

2015 na | 2016: 56 | 2017: 72 | 2018: 79 | 2020 Goal: 100

* Consistent with the Greenhouse Gas Protocol, UTC's goals and targets are adjusted to reflect the impact of acquired companies at the time of acquisition and to remove divested companies from UTC's measured performance. For example, goals and actual performance were recalibrated in 2013 to account for the Goodrich acquisition and in 2015 to reflect the sale of Sikorsky. UTC's goals and targets are not adjusted for the opening of new facilities due to organic growth or for the closing of facilities without a divestiture. Actual levels reflect data reported quarterly by UTC sites under common reporting and quality standards. Reported data are reviewed and consolidated by UTC's Corporate Office. UTC annually submits site energy use and greenhouse gas emissions data for independent review based on International Standards Organization 14064 Part 3 criteria for the validation of greenhouse gas assertions.

Health & Safety

Workplace health and safety is a fundamental indicator of sustainable performance.

Our approach to workplace safety is built on three principles:

1. **Health and safety** is a responsibility shared by all employees, from senior leaders to workers on the manufacturing floor and remote job sites.

2. **Workplace safety** requires continuous discipline and focus.

3. **Leading indicators** help focus our attention on areas where risks and injuries can emerge over time, helping us to eliminate workplace hazards, including exposure to potentially harmful chemicals.

All employees on the manufacturing floor or in field installations and repairs are trained in workplace health and safety policies and procedures, and each is responsible to report potential workplace hazards and unsafe conditions. We have established health and safety committees at each of our sites and business units. They meet quarterly to direct and coordinate EH&S initiatives at the local and global levels. Their activities include reviewing and updating programs, identifying new program initiatives and policies, conducting

evaluations, assessing progress to goals, reviewing compliance assessments, and initiating recommended actions for employee health and safety engagement and communications.

We measure the effectiveness of our health and safety programs using a variety of metrics. While not the only measurement of program success, our total recordable incident rate (TRIR) and lost-day incident rate (LDIR) show continuing improvement and what we believe are some of the best safety rates among peer companies and other multinational manufacturing companies.

Total Recordable Incident Rate & Lost-Day Incident Rate

Year	TRIR/LDIR
2015	.53/.13
2016	.50/.11
2017	.49/.10
2018	.48/.09

TRIR ■   LDIR ■
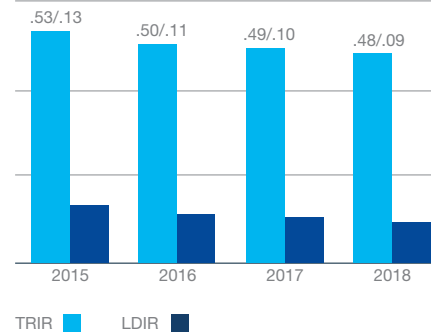
Ergonomic Risk

Ergonomic hazards represent one of the biggest risks of injury for United Technologies' employees. Our goal is to reduce ergonomic risks assessed at high or medium by 50 percent by 2020, as measured by a formal ergonomic risk assessment.

Our use of leading indicators drives our efforts to quantify and reduce the risk of ergonomic injuries, which represent our largest injury category.

Digital Transformation Drives Safety

As part of the digital transformation of the Otis service business, we're connecting our portfolio of 2 million elevators and escalators and collecting real-time equipment data that will help our global service teams predict and prevent shutdowns.

We've equipped our mechanics around the world with smartphones loaded with new, Otis-built, proprietary apps to make their jobs safer and easier.

For example, our new Otis Tune app can reduce or eliminate the need for mechanics to get on top of an elevator cab to trouble-shoot the source of noise or vibration. They can now take the same measure-ments from inside the cab by launching the app and setting the iPhone on the floor of an elevator cab or the step or rail of an escalator. The Tune app collects noise and vibration data and then diagnoses potential issues.

Exposure to Hazardous Substances

Our 2020 hazardous substance goal builds on the significant progress we've made in reducing employee workplace hazards. Recent efforts enabled us to reduce exposures to chemicals and noise for approximately 80 percent of our employees to levels that do not require the use of personal protective equipment. In 2015, we expanded the program to reduce potential employee exposures to chemicals that are carcin-ogens, reproductive toxins and endo-crine disruptors (CREs) to levels below regulatory requirements. Our goal is to reduce hazardous substance exposure limits to less than 50 percent of occupa-tional exposure limits* or to a qualitative exposure assessment score of moderate or below.

Level I Mistake Proofing Safety Controls

Level I mistake proofing is a corrective action process designed to eliminate the possibility of health and safety event recurrences. Corrective actions could include the re-engineering of work processes or the introduction of special-ized tools to facilitate specific tasks. Our 2020 goal requires an increase in the application of Level I mistake proofing methods to mitigate fatal, serious or lost day incidents.

*Occupational Exposure Limits (OEL) are defined as the lowest of the following: the American Conference of Governmental Industrial Hygienists Threshold Limit Values, or manufacturer recommended or regulatory exposure limit for chemical, physical and biological agents. Note that the implementation of workplace control measures (substitution, engineering controls or administrative controls) is required in situations where exposures exceed the OEL. Respiratory protection is provided to ensure 100% of employee exposures are below the OEL where engineering controls and administrative controls have not achieved the desired reductions.

Environment

Energy and Greenhouse Gases

Our commitment to reduce energy and greenhouse gas (GHG) emissions is informed by climate change science, the regulatory landscape and our experience in implementing targeted programs across our global manufacturing facilities.

Since 2006, we have set an annual goal that our operations achieve a 3 percent absolute reduction in their GHG emissions. This goal is consistent with the United Nations Intergovernmental Panel on Climate Change (IPCC) guidance on the annual GHG emissions reductions necessary to limit average global atmospheric temperature increases to a maximum of 2°C by 2100.

Based on our experience and organizational footprint, efficiency improvements in United Technologies' use of energy represent the greatest opportunity for us to reduce our GHG emissions.

Since 2010, we have invested $150 million in over 1,200 energy efficiency and GHG reduction projects. As a result, we have avoided emitting 165,000 metric tons of CO_2e from our operations.

In many cases, our investments resulted in payback periods of less than two years. Our worldwide manufacturing locations routinely conduct energy audits to identify additional projects that will improve our energy efficiency and reduce energy use. We believe energy efficiency is our best option for reducing GHG emissions and will remain our primary focus for mitigating our GHG impacts.

United Technologies is committed to reducing its greenhouse gas emissions in keeping with the Paris Accord objective of limiting the global average temperature increase to 2°C.

Saving Energy in Singapore

When Pratt & Whitney decided to build facilities for aftermarket repair and advanced manufacturing in the Seletar Aerospace Park in Singapore, both plants were designed with energy efficiency in mind. The facilities opened in 2014 and 2016, respectively, and both featured advanced LED lighting systems throughout the buildings and solar-powered lights in the parking area. Intelligent building systems were also installed to monitor operational equipment for maximum efficiency. Each year, the LED lighting saves more than 62,000 kilowatt hours and the solar lights save more than 11,000 kilowatt hours of electricity.

Together these improvements reduce CO_2 emissions annually by 304 metric tons or the equivalent of an average passenger vehicle driving approximately 745,000 miles. Our Singapore campus is certified LEED Gold and achieved Green Mark Gold, a designation given by Singapore's construction regulator to encourage environmentally sound buildings.

Pratt and Whitney's contribution to regional climate stewardship has been recognized by the Energy Innovation Program Office of the Singapore Economic Development Board, which presented the sites with the first national Solar Pioneer Award.

In addition to our objective of achieving greater energy efficiency in our operations, we support the transition to a lower carbon economy. We do this through the development of our own energy efficient products and through ongoing regulatory engagement to promote industry-wide policies and initiatives that will achieve greater energy efficiency and lower GHG emissions.

Climate change risk assessment and mitigation is included as part of our formal corporate risk management and governance structure. We annually disclose

our progress to the CDP through its climate change reporting program. CDP is a global platform for investors, companies, cities and other governmental bodies to disclose and manage their environmental impact.

Where appropriate, we also hold our employees accountable to GHG emissions reductions and other EH&S goals. Relevant executives, as well as facility and environmental managers, see this factored into their annual performance evaluations to help ensure progress.

Renewable Energy

We continue to track the applicability of renewable energy for our operations, including installing renewable energy resources at our facilities and participating in off-site energy procurement opportunities. We pursue and acquire renewable energy from projects that combine meaningful GHG emissions reductions with a competitive business case.

Air Emissions: Chlorinated and Brominated Solvents

Between 2006 and 2015 we reduced our use of more than 75 targeted chemicals, including volatile organic compounds, by 70 percent or more. In 2015, we set a 2020 goal to focus on a handful of the original chemicals that still remained in use, and that represented a significant risk to worker safety and air emissions stewardship. Our 2020 goal targets the elimination of air emissions from the use of eight specific chlorinated or brominated solvent chemicals if used above a level greater than 100 pounds per year.

Refrigerants

As a leader in heating, ventilating, air-conditioning and refrigeration solutions, Carrier led the industry in phasing out ozone-depleting refrigerants more than 20 years ago. We have the expertise to support our customers through the changing refrigerant landscape. With a focus on technological availability, we are committed to delivering the right low GWP refrigerant for each application and legislative requirement.

Recent product developments offering lower global warming refrigerants include:

- The introduction of R-454B, known commercially as Puron Advance, Carrier's primary lower GWP solution to replace R-410A in all of its ducted residential and light commercial packaged solutions sold in North America, starting in 2023.

- The AquaEdge 19DV centrifugal chiller with Greenspeed intelligence features breakthrough technologies and a

low GWP refrigerant R1233zd(E), which has a GWP of ~1.

- Carrier's advanced CO$_2$OLtec EVO transcritical CO$_2$ systems increase commercial refrigeration system energy efficiency using the natural refrigerant CO$_2$.

- Carrier Transicold's NaturaLINE container refrigeration unit is the first in the world providing highly efficient refrigeration using CO$_2$, reducing emissions by up to 28 percent compared with previous equipment.

Water

Like other companies, United Technologies faces increasing global water supply risks due to localized and recurrent drought, competition for water in water constrained water sheds, climate change and municipal infrastructure limitations. Reducing our water use decreases the potential for business disruption while helping to protect scarce resources. Shortages can be brought on by unplanned weather-related issues, excessive cost and competition for limited, community water supplies or regulatory restrictions that restrict access in water-vulnerable jurisdictions. Our 2020 goal commits us to reduce our water use by 25 percent, compared to 2015 baseline levels. We report on our water risk management and conservation program progress annually through the CDP.

Water Best Management Practices

For 2020, we also introduced a new goal targeting the implementation of water best management practices (BMPs) at our manufacturing facilities, including a water balance and leak detection program. We established site-specific goals that align with a site's size and its water scarcity category and that require the implementation of up to eight additional BMPs.

Waste Reduction and Recycling

Our manufacturing operations generate more than 600 million pounds of industrial process waste each year. Our waste management program is designed to reduce our overall waste generation and impact through three actions:

Reduction: We require each manufacturing facility to implement 10 waste BMPs to drive reductions in waste volume, provide effective management of specific waste streams, including acids and alkalis and machine coolants, and increase recycling of materials.

Hazardous waste reduction target: Hazardous waste represents less than 10 percent of our total waste volume and poses the greatest potential risk to the environment. The risks also extend to the required regulatory compliance and the overall cost of managing waste reduction. To ensure the appropriate focus, our 2020 goal requires each business unit, regardless of its growth, to reduce its generation of hazardous waste by 2 percent per year when compared to our 2015 baseline level.

Recycling target: More than 90 percent of the waste we generate each year is non-hazardous and includes commodities such as metal, wood, paper and glass. Our 2020 goal aims for 90 percent recycling of industrial waste across our factories and operations. This goal is the latest iteration of our historic commitment to recycling, which was first quantified in a formal target in 2006.

Closing the Loop on Water Consumption

Collins Aerospace worked with the State of California and the local municipal water district for nearly three years on the planning, design and construction of our first U.S.-based water reclamation initiative at our Landing Systems manufacturing facility in Santa Fe Springs, California. The project, which went online in 2018, is expected to increase water savings by 22 million gallons annually at the site, adding substantially to the 18.4 million gallons of water already saved on the premises since 2013. The water reclamation project flows site-generated industrial waste water to a city treatment facility, which returns the treated water to the Santa Fe Springs facility to support site operations. The water is distributed through a separate connection with no impact to sanitary or drinking water at the location or in the surrounding community.

18.4M
gallons water saved since 2013

+22M
expected gallons annual water savings from:

- Cooling tower optimization
- Water reclamation & furnace processing improvements

Building Sustainably

As a global leader in high-technology building systems and services, United Technologies understands that how we design, build and operate our buildings has profound implications for our employees, local communities and environment—today and for decades to come. That's why we have invested in more than 40 LEED-certified buildings in 12 countries through 2018.

We are also proud of our accomplishments in supporting the global green building movement. Carrier was instrumental in launching the U.S. Green

Building Council in 1993 and was the first company to join the organization. United Technologies has continued this commitment internationally as a founding member of Green Building Councils across five continents. We also have a legacy of international green building firsts. The Pratt & Whitney Shanghai Engine Center was the first building in China to achieve LEED Platinum certification—the highest designation. And Carrier had the first industrial facility outside the United States to achieve LEED Gold under the LEED for Existing Buildings green building program.

The U.S. Green Building Council's LEED, or Leadership in Energy and Environmental Design, is the preeminent program for the design, construction, maintenance and operations of high-performance green buildings.

43 LEED-Certified Buildings Through 2018

1	Warehouse
3	R&D Centers
17	Offices
22	Factories
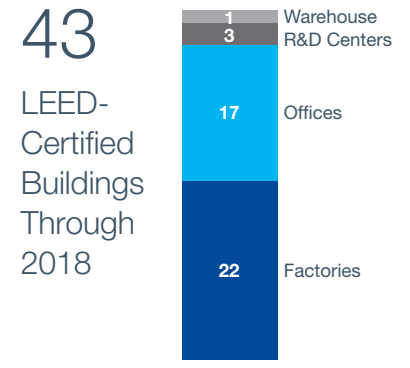
At our LEED-certified digital hub in Brooklyn, New York, a team of nearly 150 data science, design, product and software experts are working to develop solutions that make the most of big data and the increasing connectivity and efficiency of products and services.

Their mission is to ensure that United Technologies is a leader in the digital world, developing products and services that help to solve some of the world's biggest societal challenges.

The UTC Center for Intelligent Buildings, which is LEED Platinum certified, has nearly 900 solar panels producing almost 30 percent of the power needed to run the building.

Two recent additions to our portfolio of green buildings are the LEED-Gold certified Pratt & Whitney engineering & technology center (top) and the United Technologies research center (bottom), both located in East Hartford, Connecticut.

Investing in Our Communities

We believe that engagement and investment build vibrant communities. As a core component of our purpose, we are committed to improving the quality of life and supporting economic and social development everywhere our employees live and work.

We encourage and celebrate our employees' active roles in strengthening their communities. And we inspire the next generation of diverse innovation and business leaders through our skills-based volunteerism, focused financial contributions and committed partnerships with leading nonprofits in STEM and sustainability.

In 2018, we supported more than 6,000 civic, cultural, economic and social welfare organizations around the world, and since 2012, we have invested more than $250 million in our communities.

Engineers without Borders— Building Lasting Impact in Developing Communities

Access to clean, drinkable water is something that many of us take for granted. This wasn't the case for a Nepalese mountaintop village. With no running water and the nearest source a stream at the base of the mountain, women and children would spend a good part of each day bringing water up to their homes. With the support of Pratt & Whitney employees, through Engineers Without Borders USA, the women in the community now can use what were water-fetching hours to help with their family's farmland production or create income-generating handicrafts. The Engineers Without Borders team designed a system to transport water 1,000 feet up the mountain to the community center.

The system includes solar-powered pumps, holding tanks and, at the summit, seven tap stands for village use. Since 2010, United Technologies and its employees have supported long-term sustainable solutions through 85 Engineers Without Borders projects in 37 developing countries.

85+ projects in 37 developing countries

Inspiring the Next Generation

As the speed of innovation quickens, inspiring the next generation's diverse technical talent has never been more critical. To accelerate gender, racial and ethnic diversity among future scientists, engineers and advanced manufacturing professionals, we have made new and far-reaching investments in two leading nonprofits. Girls Who Code and NAF are laser-focused on increasing the numbers of females and other underrepresented groups pursuing education and careers in fields such as automation, additive manufacturing and artificial intelligence. Through Girls Who Code, we have committed to establishing after-school clubs, United Technologies-hosted summer immersion programs and global expansion. At the same time, we also are building on United Technologies' longstanding support for a NAF Academy of Engineering in Hartford, Connecticut, by helping establish new academies to provide underrepresented students with the skills needed to succeed in STEM careers.

STEM and Sustainability for China's Neediest Schools

Since 2011, United Technologies' Green Shoots program has enhanced student learning environments by building or replacing educational facilities, setting up libraries and offering classroom lessons that help youth become more aware of the benefits of environmental stewardship and safety. As an example, 60 Carrier employees volunteered at HongMei Primary School located on the outskirts of Shanghai. Partnering with the school's students, the Carrier team helped repair and paint the school building and provided mentorship on the role education plays in developing a future career path. To date, Green Shoots has benefited more than 50,000 children in primary schools largely in Asia, including China, India, Indonesia, Japan, Korea, Malaysia, Myanmar, Singapore, Thailand and Vietnam. The program was recently expanded to include Australia, the Middle East and the United States.

Restoring Sight through Orbis Flying Eye Hospital

Eye doctors in Trujillo, Peru, and other developing countries last year received hands-on training to help fight avoidable blindness through the use of a mobile state-of-the-art teaching facility complete with operating room, classroom and recovery room—all onboard an aircraft. With financial support from Collins Aerospace, the new Orbis "Mobile Simulation Center" is accelerating the readiness of local doctors and is expected to decrease training costs by 40 percent. The Orbis Flying Eye Hospital travels to countries with under-resourced medical services to train local health care teams, while also conducting critical sight-saving and restorative surgeries. In 2017, Orbis conducted 5 million screenings and eye exams, performed 96,000 surgeries and laser procedures and trained 4,500 doctors.

In All Seasons and Cities Special Olympians Win Big

Whether in high-jump, alpine skiing or snowboarding, Otis employees have developed a knack for encouraging athletes with disabilities to achieve personal triumphs. Still others have led basketball and soccer clinics while many more have raised critically needed funds through annual walk and run festivals in support of Special Olympics.

For 40 years, with millions of dollars and the leadership of Otis service technicians, sales representatives and supervisors, United Technologies has provided sports training and inspiration for children and adults with intellectual disabilities. In Tokyo, Paris, Madrid, Sydney and in Connecticut, hundreds of Otis employees continue a decades-long tradition of sustaining support for Special Olympics.

Winners of the Chairman's Award at the 2018 *FIRST* Robotics World Championship, the Kell Robotics team from Marietta, Georgia was mentored by Jimmy Sanabria of Carrier's Automated Logic business who has mentored the team for three years.

FIRST is dedicated to inspiring the next generation of engineers, scientists and advanced manufacturing professionals. As a strategic partner and founding sponsor of *FIRST* for the past two-dozen years, United Technologies has provided more than $10 million in sponsorship, and thousands of hours in employee mentoring for more than 50,000 students.

GRI Index

General Dislosures

GRI 102 – Organizational Profile

102-1	Organization name	United Technologies
102-2	Activities, brands, products and services	> Products & Brands
102-3	Location of headquarters	10 Farm Springs Rd, Farmington, Connecticut
102-4	Location of operations	> Locations
102-5	Ownership and legal form	> Annual Report
102-6	Markets served	> Annual Report
102-7	Scale of the organization	> Annual Report
102-9	Supply chain	> ESG Investors
102-10	Significant changes to the organization and its supply chain	> Annual Report
102-13	Membership associations	> Public Activities

GRI 102 – Strategy

102-14	CEO Letter	CEO Letter
102-15	Key impacts, risks and opportunities	Leading in Environment, Health & Safety
		> Annual Report
		> Proxy Statement
		> CDP Climate Change
		> CDP Water

GRI 102 – Ethics & Integrity

102-16	Values, principles, standards and norms of behavior	> Code of Ethics
102-17	Mechanisms for advice and concerns about ethics and social topics	> United by Values

GRI Index

General Dislosures (continued)

GRI 102 – Governance

102-18	Governance structure of the organization	> Corporate Governance
102-20	Executive-level responsibility for economic, environmental and social topics	> Proxy Statement
102-22	Composition of the board and its committees	> Corporate Governance
102-23	Chair of the highest governance body	> Proxy Statement
102-24	Nominating and selecting the highest governance body	> Proxy Statement
102-25	Conflicts of interest	> Proxy Statement
102-26	Board and executive roles	> Corporate Governance
102-29	Identifying and managing economic, environmental and social	> Proxy Statement
102-31	Review of economic, environmental and social topics	> Proxy Statement
102-35	Remuneration policies	> Proxy Statement
102-36	Process for determining remuneration	> Proxy Statement
102-37	Stakeholders' involvement in remuneration	> Proxy Statement
102-38	Annual total compensation ratio	> Proxy Statement

GRI 102 – Stakeholder Engagement

102-40	Stakeholder engagement	> Annual Report
102-43	Approach to stakeholder engagement	Stakeholder Engagement

GRI 102 – Reporting Practice

102-45	Entities included in financial statements	> Annual Report
102-50	Reporting period	January 1, 2018 – December 31, 2018
102-53	Report contact	media@utc.com
102-55	GRI content index	GRI Index

GRI Index

Economic

GRI 201 – Economic Performance

201-1	Direct economic value generated and distributed	> Annual Report
201-2	Financial implications and other risks and opportunities due to climate change	> CDP Climate Change
201-3	Benefit plan coverage	> Benefits
201-4	Financial assistance from the government	> Annual Report

GRI 203 – Indirect Economic Impacts

203-1	Infrastructure investments and services supported	Innovating to Advance Society
203-2	Indirect economic impacts	Innovating to Advance Society

GRI 205 – Anti-Corruption

205-1	Operations assessed for risks related to corruption	> Anti-Corruption Initiatives
205-2	Communication and training about anti-corruption policies and procedures	> Anti-Corruption Initiatives

GRI 206 – Anti-Competitive Behavior

206-1	Anti-competitive behavior	> United by Values

GRI Index

Environmental

GRI 302 – Energy

302-1	Energy consumption within the organization (Scopes 1 + 2)	> CDP Climate Change
302-2	Energy consumption outside the organization (Scope 3)	> CDP Climate Change
302-3	Energy intensity	> CDP Climate Change
302-4	Reduction of energy consumption	> CDP Climate Change
302-5	Reductions in energy requirements of products and services	> Innovating to Advance Society > CDP Climate Change

GRI 303 – Water and Effluents

303-1	Interactions with water as a shared resource	> CDP Water
303-2	Management of water discharge-related impacts	> CDP Water
303-3	Water withdrawal	> CDP Water
303-4	Water discharge	> CDP Water
303-5	Water consumption	> CDP Water

GRI 305 – Emissions

305-1	Direct GHG emissions (Scope 1)	> CDP Climate Change
305-2	Indirect GHG emissions (Scope 2)	> CDP Climate Change
305-3	Other indirect GHG emissions (Scope 3)	> CDP Climate Change
305-4	GHG emissions intensity	> CDP Climate Change
305-5	Reduction of GHG emissions	> CDP Climate Change
305-7	Nitrogen oxides (NO_X), sulfur oxides (SO_X) and other significant air	> CDP Climate Change

GRI 306 – Effluents & Waste

306-1	Water discharge	> CDP Water

GRI 308 – Supplier Environmental Assessment

308-1	New suppliers screened using environmental criteria	> Supplier Code of Conduct

GRI Index

Social

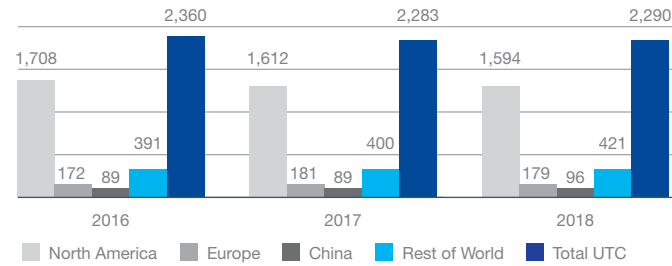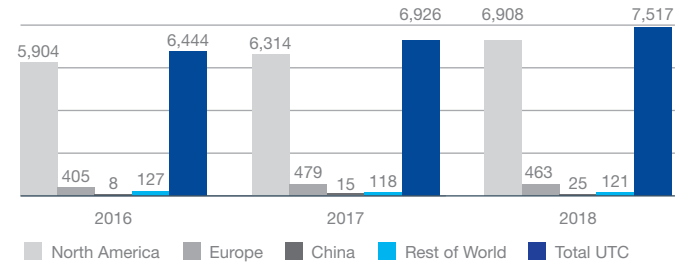|		
GRI 403 – Organizational Profile		
401-2	Benefits provided to full-time employees	> Benefits
401-3	Parental leave	> Benefits
GRI 403 – Occupational Health & Safety		
403-1	Occupational health and safety management system	Leading in Environment, Health & Safety
403-2	Hazard identification, risk assessment and incident investigation	Leading in Environment, Health & Safety
403-4	Worker participation, consultation and communication on occupational health and safety	Leading in Environment, Health & Safety
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Leading in Environment, Health & Safety Operating Responsibly
403-9	Work-related injuries	Leading in Environment, Health & Safety
403-10	Work-related ill health	Leading in Environment, Health & Safety
GRI 404 – Training and Education		
404-2	Programs for upgrading employee skills and transition assistance programs	Investing in Our People
GRI 405 – Diversity & Equal Opportunity		
405-1	Diversity of governance bodies and employees	> Global Diversity & Inclusion
GRI 415 – Public Policy		
415-1	Political contributions	> Public Activities
GRI 419 – Socioeconomic Compliance		
419-1	Noncompliance with laws and regulations in the social and economic area	> Annual Report

Our Global Operations: Environmental Performance Data

Purchased Electricity
(million kWh)

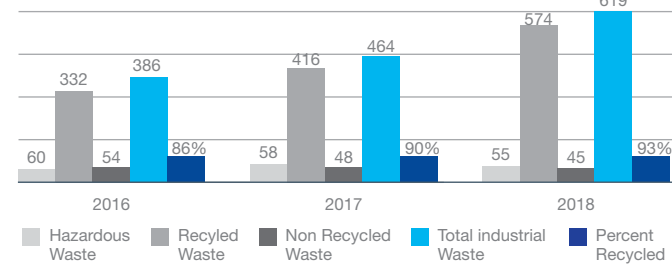|	North America	Europe	China	Rest of World	Total UTC
2016	1,708	172	89	391	2,360
2017	1,612	181	89	400	2,283
2018	1,594	179	96	421	2,290

Natural Gas
(million cubic feet)

	North America	Europe	China	Rest of World	Total UTC
2016	5,904	405	8	127	6,444
2017	6,314	479	15	118	6,926
2018	6,908	463	25	121	7,517

Waste Management
(million lbs)

	Hazardous Waste	Recyled Waste	Non Recycled Waste	Total industrial Waste	Percent Recycled
2016	60	332	54	386	86%
2017	58	416	48	464	90%
2018	55	574	45	619	93%

	Total Energy Used	Renewable Energy Used
2016	35.9 trillion BTUs	110 billion BTUs
2017	38.6 trillion BTUs	140 billion BTUs
2018	35.3 trillion BTUs	155 billion BTUs

Facility Investments in Low-Carbon Technologies
(2010–2018)

1,200
energy efficiency and GHG reduction projects

$150
million invested

165,000
metric tons of CO_2e emissions avoided

Recognition

Institutional Investor	All-American Executive Team: Among the most honored companies in the aerospace and defense electronics sector
Fortune	Among the world's most admired companies
Forbes	Among America's best large company employers Among America's best employers for women
Latina Style 50	Among the best companies for Latinas to work
Human Rights Campaign Foundation Corporate Equality Index	Among the best places to work for LGBTQ equality
DiversityInc	Among noteworthy companies for diversity practices
Disability Equality Index	Among the best places to work for employment disability inclusion
CDP (formerly known as the Carbon Disclosure Project)	Rated A- for companies responding to climate change

United Technologies

This report and its associated web content at www.utc.com provide detailed examples of how our approach to integrating responsibility into our operations fosters a culture of innovation and delivers results.