

In April 2020, we returned to our roots as a publicly traded, independent company. As a standalone business, Otis is adopting a new EH&S management system, one that is suited to the unique challenges of our industry. For example, we are refreshing our policies, standard practices and key process indicators to ensure we meet challenges we may face today and the future. We are instilling into our company what it means to be a learning organization and creating a framework for sharing best practices. We are also reinforcing the fact that Environment, Health & Safety matters, such as sustainability, are everyone's responsibility.



With customers in approximately 200 countries and territories worldwide, Otis is a true global citizen. To us, sustainability means contributing to community vitality by making purposeful decisions today and constantly advancing toward a more sustainable world tomorrow. We do this by innovating products and services to reduce consumption, evaluating our own consumption and using our resources more efficiently.



Chongging - LEED Gold certified

One way Otis demonstrates our commitment to environmental sustainability is through the construction of green factories. Otis designed and constructed the first LEED certified elevator production factory in China. We also recently obtained LEED Gold status of our production factory in India.

Additionally, nearly 80% of our locations are certified to the environmental management standard ISO 14001, and in Europe six of our factories are certified to the energy management standard ISO 50001.

**OTIS** 

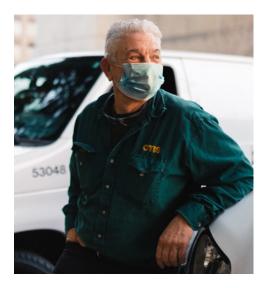
### **ENVIRONMENT, HEALTH & SAFETY (EH&S)**

Safety is one of our three Otis Absolutes. As part of our commitment to safety, our EH&S policy states that "we will not be satisfied until our workplaces are safe from hazards, our employees are injury free, our products and services are safe, and our commitment and record in protecting the environment is unmatched."





Bengaluru - IGBC Gold certified



#### It is the policy of Otis and our operating businesses to:

- Eliminate all employee injuries, and all subcontractor fatalities and serious injuries, by making the workplace free from hazards and unsafe actions;
- Drive pollutants in manufacturing processes to the lowest achievable levels;
- Conserve natural resources in the design, manufacture, use and disposal of products and the delivery of services;
- Establish safety and environmental protection standards that comply with local laws and go beyond, when necessary, to achieve the goals of this policy;
- Hold operating managers accountable for safety and environmental performance and for providing leadership and required resources;
- Ensure the security of employees at all Otis locations by creating a culture that does not tolerate workplace violence; and require all employees and, where applicable, subcontractors to comply with global, regional, and operation-level EH&S requirements.

#### PRODUCT SAFETY AND ENVIRONMENTAL IMPACT

We continually pursue opportunities to optimize the energy usage of our products. According to our published Environmental Product Declarations (EPDs)<sup>1</sup>, the use (operational) phase is the longest phase in the life cycle of the elevator, with energy consumption being one of the most relevant stages impacting the environment. Therefore, we work continually to improve the energy efficiency of the elevators. Safety data sheets are available and provided to customers required by local law and requirements.

EPDs are currently available for three products (Otis Gen2 Life® elevator; Otis Gen2 Stream High Rise® elevator; Otis Gen2 Stream® elevator) in accordance with ISO 14025.

Each EPD includes a Life Cycle Assessment. Each EPD provides an assessment of aspects of the Life Cycle Assessments (LCAs) that include: energy usage, waste generation, air emissions. LCA phases evaluated are: (1) Upstream (raw material supply, transport, outsourced manufacturing); (2) Core (in-house manufacturing); and (3) Downstream (transport & installation, use (operation), and end-of-life treatment). Included in each EPD is a Health Product Declaration (HPD)², which discloses the materials in the product. The declaration can be accessed by employees and customers. The EPDs are specific to products made at the Otis Gien facility for installation in Europe, Asia, Australia, Central and South America.

Our commitment to energy efficiency is reflected in the Otis Gen2 having achieved an A-class energy efficiency classification, according to ISO 25745 standard. The Otis ReGen drive, now standard on the Gen2 elevator system, puts electricity back into a building's grid by capturing normally wasted energy. Thanks to low harmonic distortion, this recycled energy provides clean power minimizing impact to a building's electrical system. These features help make the Gen2 system up to 75% more efficient than conventional systems under normal operating conditions. The Gen2 system also uses up to 40% less energy than non-regenerative machine-roomless systems.

1. See the International EPD Database for Otis at https://www.environdec.com/EPD-Search/





Safety and reliability have been our foremost concerns since founder Elisha Graves Otis invented the elevator safety brake in 1853. We have testing facilities, or test towers, located throughout the world. These locations continually test critical components for product safety and durability.

We also maintain quality assurance locations. For example, at the Otis Bristol Testing & Research Center in Connecticut, products are thoroughly tested to ensure reliability in various operating conditions. Before being installed at sites worldwide, Otis products must pass more than 20 test parameters to simulate the most challenging of operating conditions including construction-site dust, ocean fog, drastic temperature changes and power surges. Our engineers analyze any mechanical or electrical failures to pinpoint the root causes and eliminate them. During testing in Highly Accelerated Life Testing (HALT) chambers, engineers dramatically increase stress on components using vibration and temperature extremes to cause component failures. This allows Otis to identify the weakest part of a component and make any necessary modifications to optimize performance before products are delivered to the job site.



Otis Bristol Testing & **Research Center** 

Product features include addressing potential sources of noise and vibration, our engineers designed the Gen2 system with passenger and tenant comfort in mind. The Gen2 system's ride quality is so smooth and quiet that passengers often don't notice it at all. Additionally, the Pulse system provides 24/7 monitoring of the Gen2's flat coated-steel belts, including advance notice of belt wear by early detection of weakness. Monitoring services include the Otis Maintenance Management System (OMMS), a predictive and preventive maintenance system, minimizing service calls and downtime of elevator units on Otis maintenance plans.

#### Other features, as presented in each EPD include:

- Based on expected service life of 20 years.
- Cardboard boxes are Forest Stewardship Council certified. Wood made pallets are certified by the Program for the Endorsement of Forest Certification (EFC).
- The main materials used in the Gen2 Life® elevator are metals (mainly steel) and inert materials (mainly concrete).
- Steel and non-ferrous metals as well as the electronic equipment contributing approximately to 70% of the elevator's composition - can all be recycled. For the inert materials (~30%), landfilling is assumed as a realistic and conservative approach.



We have a wide coverage of offices with trained personnel responding to customer needs and returning the elevator back to service. If a part is needed, we have multiple service centers around the world stocking spare parts to support the maintenance and repairs of elevators. In most cases these parts are available for overnight delivery for the unit, where the Otis personnel would make the repair/replacement and return the elevator back into service.

Otis offers a variety of products to enhance the safety, performance and functionality of a customer's elevator. These upgrades may include functional changes to the elevator software, adding products like Compass destination dispatching, Otis One, our IoT platform, or aesthetic upgrades for fixtures, displays or cab interiors. A current, significant initiative is upgrades to disinfect equipment, reduce points of contact and promote social distancing in response to COVID-19.

#### **HEALTH & SAFETY MANAGEMENT SYSTEM**



Otis currently employs a management system<sup>2</sup> which is equivalent to OHSAS 18001. We are upgrading our EHSMS so that it directly aligns with the ISO standards. We maintain global EH&S standards using an audit program. Regions apply the Otis EH&S management system when executing Otis global standards programs, while they simultaneously ensure compliance with regional and local legal and other requirements. Our H&S Management System is applied to all our locations and job sites.

Currently, 11 of our 18 factories are OHSAS certified: (a) China: Chongging, Hangzhou, Tianjin OETM, Tianjin OECC, (b) Czech Republic – Breclay, (c) France – Gien, (d) Germany – Berlin (SSI), (e) Russia – St. Petersburg, (f) Spain – Vigo, Madrid, San Sebastian.

Otis tracks progress to goals in a global data management system. This system was developed by a third party, and is used to gather indicators, calculate and report performance across the organization.

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.



2. More on the Otis legacy management system can be found in the last corporate sustainability report published by our former parent company at https://www.rtx.com/-/media/project/united-technologies/utc/files/2018\_utc\_cr-report\_final.pdf



A significant point of emphasis has been the reduction in ergonomic risk within our factory operations. Based on historic incident data, ergonomic hazards represent one of the biggest risks of injury for Otis employees. Since our risk reduction initiative began in 2015, we have achieved a reduction rate of over 80% of factory tasks considered "high risk" and over 50% for those tasks considered "medium risk." These reductions were achieved through the implementation of various process improvement projects, administrative changes and, in some cases, task elimination.

Otis is a founding member of the Global Elevator Safety Forum, a consortium of leading elevator manufacturing and service providers whose goal is to reduce the number of fatalities to zero through cooperation among its members. Activities of the Global Elevator Safety Forum include the application of safety best practices worldwide, a safety excellence recognition program, Global Elevator Safety Day and safety metrics.

#### ENVIRONMENTAL MANAGEMENT SYSTEM

Similar to our H&S Management System approach, Otis uses an Environmental Management System (EMS)<sup>3</sup>. We are upgrading our EHSMS so that it directly aligns with the ISO standards. Our current standard addresses structure and responsibilities; environmental program; targets and objectives; training and awareness; data compilation system; auditing and annual program evaluations. The EMS is currently focused on our factory locations, and regions supplement the EMS with region- and local-specific requirements.



Otis St. Petersburg, Russia

### Otis factory locations with ISO 14001 certification are:

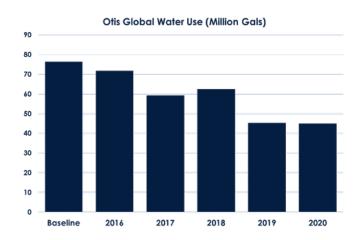
Otis factory locations with ISO 14001 certification are: (a) China: Chongqing, Hangzhou, Tianjin OETM, Tianjin OECC, (b) Czech Republic – Breclav, (c) France – Gien, (d) Germany – Berlin (SSI), (e) Russia –St. Petersburg, (f) Spain – Vigo , Madrid, San Sebastian, (g) India – Bangalore, (h) Japan – Shibayama, and (i) Turkey – Buga.

Progress to goals are tracked in our global data management system.



#### WATER USAGE

Water usage is tracked for all manufacturing and any non-manufacturing sites with combined energy and water utilities costing U.S. \$100,000 or more per year. Also, Otis uses the World Wildlife Foundation Water Risk Filter to classify water use scarcity around the world in five areas of physical risk. Currently, we have 5 production facilities located in extremely scarce water regions, 2 production facilities in scarce water regions, and 6 production facilities in stressed water regions, with the remaining locations in areas categorized as water abundant.



In addition to the water tracked from municipal water sources shown above, in 2020 Otis withdrew just over 3 million gallons of water from well sources. Approximately 1 million gallons were recycled for non-potable reuse.

For 2020, the goal for water usage was to maintain existing usage levels. Between 2015 and 2020, Otis reduced its water consumption by over 40%. Otis drives water use optimization using Best Management Practices and has a strategy for implementation depending on the amount of water used and the location's water scarcity region.

#### These BMPs include:

Water balance
Water leak management
Eliminate once through cooling
Cooling tower management
Flow meters

Xeriscaping
Rinse tank overflow
Rainwater harvesting
Recycle process water
Low fixtures and flow restrictors

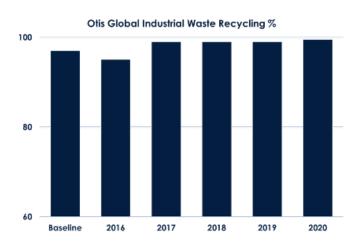
Locations in high-stress water scarcity regions and using more than 1,000,000 gallons per year work toward implementation of all these BMPs. Locations in water abundant regions or that use less than 1,000,000 gallons per year are required to implement a subset of the BMPs. All locations, regardless of size and location, implement the two "Minimum" BMPs, water balance and leak management planning.

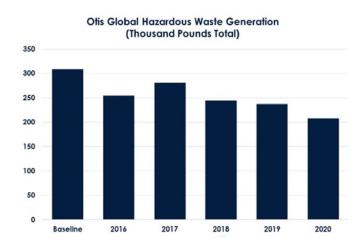
Regarding wastewater treatment and disposal from Otis production facilities, only sanitary wastewater is discharged.



#### WASTE AND MATERIALS MANAGEMENT

Otis waste management is part of our EMS and includes the following directive: material reuse and waste recycling are the preferred management options. When reuse or recycling are not available, practical or technically feasible, business unit locations shall consider final treatment and disposal methods, which permanently alter, neutralize, detoxify or destroy waste so as to minimize the impact to human health and the environment and limit potential future liability." We strive to minimize waste generation and maximize opportunities to recycle waste.





In 2020, Otis generated just over 200,000 pounds of hazardous waste worldwide. This amount is less than 1% of our total waste generation. In 2015, we set a target of 10% hazardous waste reduction by 2020 and have met that goal. We also established a goal to recycle at least 90% of our industrial waste (including paper and cardboard) by 2020 and have been consistently above that target.

Otis uses a data management system to track waste generation. Hazardous waste is defined according to the environmental regulations in the jurisdiction of the facility. Regulatory compliance includes bans or restrictions on substances of concern within the product. We focus on limiting, if not eliminating altogether, substances of concern during product development and manufacturing. The Otis program is built on REACH and RoHS regulations to avoid substances which impact human health and the environment. We've supplemented REACH compliance with a program to eliminate 9 halogenated solvents in its processes. Otis has had no significant halogenated solvents (i.e., more than 100 pounds per year) in its operations since at least 2015.



#### **ENERGY MANAGEMENT**

Otis uses an Energy and Greenhouse Gas Management standard practice which is largely equivalent with ISO 50001. This standard practice is part of our EMS. Relevant elements implemented by Otis of the current standard practice includes: an energy policy; structure and responsibilities; action plans; targets and objectives; training and awareness; data compilation system; audits and annual program evaluations.

We track progress to goals in a global data management system. This system was developed by a third party, and is used to gather indicators, calculate and report performance across the organization.



**Madrid – Solar Array** 

In 2020, energy for factory and office use came from the following sources: Purchased Electricity (62%); Natural Gas (34%), Steam (2%); other fuels (1%); self-generating renewable (1%). There are three Otis locations equipped with solar arrays, in Madrid, Spain, Bangalore, India and Florence, South Carolina. In 2020, these locations generated approximately 2.4 Million kilowatt-hours of energy.

While the EMS is focused primarily on manufacturing activities, emissions are tracked from motor vehicles and business travel as well. Otis currently manages motor vehicle compliance at the local level.

A cornerstone of the energy management program is the continuation of implementation of Best Management Practices (BPMs) at each of the Otis facilities. We track implementation using our global data management system.

Energy and GHG BMPs are currently focused on:

Energy team Lighting HVAC Boilers Motor Management Fleet Management Building Envelope Process Energy

Shut-it-Off Building Automation



Six of the 18 Otis factory locations are ISO 50001 certified: (a) Czech Republic – Breclav, (b) France – Gien, (c) Germany – Berlin (SSI), (d) Spain – Vigo, Madrid, San Sebastian.

Otis employs a variety of auditing mechanisms to evaluate data accuracy. These mechanisms include external third-party auditors as part of the CDP<sup>3</sup> reporting process, corporate energy assessments as mandated but at least every 5 years as required by our EHSMS, and compliance audits as part of EHSMS audit program performed at least once every 4 years. The EHSMS audit program consists of identifying program gaps and corrective actions and ensuring gap closure.



**Otis Breclav Czech Republic** 

Additionally, facilities that maintain ISO 50001 certification are subject to periodic third-party audits. Certain Otis locations in Europe also are subject to the EU Energy Directive and file submissions to regulatory agencies.

These external verification mechanisms, combined with internal quarterly reviews of data by secondparty corporate professionals in preparation, provides Otis with confidence in the energy data reported from our factories.

#### **GREENHOUSE GAS AND CLIMATE CHANGE**

We have set a goal of reducing Scope 1 and Scope 2 greenhouse gas emissions by 50 percent by 2030 vs. a 2019 baseline. Plans for reduction include identification of factory optimization through a combination of the Energy BMPs and other conservation projects. Also, Otis is developing long-term strategies for the reduction of greenhouse gas emissions from its office locations and fleet.

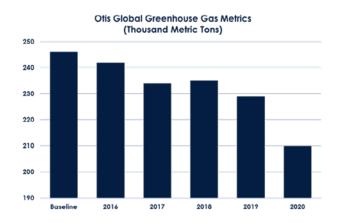
We account for Scope 1 (approximately 134,000 Mtons in 2020), Scope 2 (approximately 75,000 Mtons in 2020). Otis tracks  $\mathrm{CO}_2$ ,  $\mathrm{N}_2\mathrm{O}$  and  $\mathrm{CH}_4$  using emission quantification methodologies from the WRI/WBCSD Greenhouse Gas Protocol Country-specific emission factors, from the U.S. Environmental Protection Agency (regional grid factors), the International Energy Agency (CO2 emission factors by country, the Australian National Greenhouse Accounts (emission factors by state) and the Canada GHG National Inventory Report (emission factors by province). The Global Warming potential (GWP) for direct process emissions are built into our global data management system.

3. Otis legacy environmental data and management system programs were reported to CDP for evaluation as part of a submission by our former parent company. See <a href="https://www.rtx.com/-/media/project/united-technologies/utc/files/investors/cdp-2018-climate-change-response---united-technologies-corporation.pdf?rev=d59236b62c5b475d8a3ca2538019162b&hash=C44663FBADF004827713CEF88D7A62AE</a>

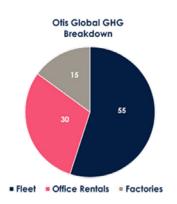


Otis updates emission factors as they are published (typically on an annual basis) by the appropriate government agency to ensure that the system reflects the most accurate CO<sub>2</sub>e calculations.

For Otis, climate change was identified as a strategic issue in 1997 and the first formal corporate and facility energy efficiency and GHG emissions reduction targets were established at that time.



In 2006 our former parent corporation (UTC) published a formal climate change policy statement identifying climate change as an unprecedented threat to global society and prosperity and committed its operating entities to working aggressively to reduce the climate-related impacts of its facilities and products. Otis will continue to implement an energy and greenhouse gas strategy designed to lower our greenhouse gas emissions, with greater emphasis on finding ways to optimize not only our factory emissions but our office space and fleet vehicle emissions.



Regarding office locations, Otis currently maintains over 2,000 locations with over 9 million square feet. Otis assigns electricity and natural gas values on a per square foot basis, using typical per square foot energy consumption factors for office and warehouse space from the U.S. Energy Information Administration's Commercial Buildings Energy Consumption Survey (<a href="https://www.eia.gov/consumption/commercial/">www.eia.gov/consumption/commercial/</a>).

Regarding fleet vehicle management, Otis uses over 20,000 motor vehicles globally with reporting from over 100 entities. In 2020, Otis locations reported using nearly 13 million gallons of fuel.

Our current climate change assessment identifies potential short- and long-term related risks, and considers the likelihood of impact on operations, customers and suppliers, and business opportunities expected to emerge over time.



For example, in the short-term risks of climate change on Otis may include business disruptions associated with current and increasing extreme weather events or cost increases associated with introduction of regulated costs of carbon in countries and regions where Otis has manufacturing operations. Short-term opportunities arising from climate change include increased market demand for Otis energy efficient products in response to current and emerging European building efficiency mandates issued as part of EU national climate change mitigation plans.

In the long term, risks of climate change on Otis may include supply chain and other business disruptions associated with permanent sea water and storm surge incursions in low lying coastal areas where Otis and/or supplier sites are located and reductions in municipal services and reduced quality of life in communities where Otis operates that have to invest increasing amounts of annual budgets to adapt to sea water incursions, making it more difficult to attract or retain Otis employees. Long-term opportunities arising from climate change include increased market demand for Otis energy efficient equipment in response to continuing increases in average global temperatures and increased competitiveness of Otis products that address global demand for energy efficient and low GHG emitting products.

