



GOVERNANCE
& APPROACH

ETHICS &
COMPLIANCE

INNOVATION &
TECHNOLOGY

SUPPLY CHAIN
PRACTICES

HUMAN CAPITAL
MANAGEMENT

WORKPLACE
HEALTH & SAFETY

ENVIRONMENTAL
FOOTPRINT

2017 SUSTAINABILITY REPORT

Strong partner for growth through our ethical business practices, technological innovations and commitment to transparency.

A Message from Our CEO



Dear Valued Stakeholders,

At ESCO Technologies we recognize the growing global need to mitigate our environmental impact, protect our workers and enhance our communities. Our sustainability efforts are focused on learning to better understand and reduce our energy consumption and carbon footprint. We feel our positive initiatives also provide opportunities to increase employee engagement and workplace satisfaction as well as enhance our presence in the communities where we are located. Ultimately, we see our engagement in sustainability as supporting our goal to create long-term value for our shareholders.

In 2016, we completed a materiality assessment to identify the most important environmental, social and governance (ESG) topics for ESCO and issued our first sustainability report. Our 2016 report outlined our 8 most important topics and included our first measure of energy usage and greenhouse emissions. This created a baseline from which we can now begin to measure and set goals for our ongoing performance. Our 2017 report includes our first measure of water usage and similarly enables us to better understand our current consumption and explore ways to more efficiently manage our water usage. We are working to enhance and standardize our data collection and reporting efforts to further reduce our consumption in these areas.

In 2017 we also surveyed our subsidiaries to get a better understanding of the collective sustainability projects already underway. We are pleased with our initial findings regarding sustainability efforts currently in process. Recent highlights to reduce energy consumption and our carbon footprint include the installation of solar panels, switching to LED lighting, adding motion sensors and programmable thermostats and installing more energy efficient HVAC units and manufacturing equipment. These are just a few examples of the great work the ESCO companies are doing.

As a company, ESCO is focused on generating consistent and profitable long-term growth through the innovation and expansion of our highly engineered products and solutions. In 2017, we delivered solid operating results in our core businesses while expanding our product offerings and end markets served through key acquisitions. Looking ahead to 2018, we will work to integrate these new businesses into our sustainability efforts. We will also continue to deepen our efforts to integrate sustainability thinking into our work.

We hope you find our 2017 report informative as our intent is to demonstrate our commitment to integrating sustainability into our ongoing business model. We feel we are making meaningful progress in better understanding and managing our impact on the environment and our local communities.

With best regards on behalf of our team,



Corporate Resources

[2017 Annual Report
& Form 10-K](#)

[Management Team](#)

A handwritten signature in black ink, appearing to read 'Vic Richey', with a stylized, cursive script.

Vic Richey

Chairman, Chief Executive Officer & President



2017 SUSTAINABILITY REPORT

Setting the direction for our company through our responsible governance practices and our approach to sustainability.



Governance & Approach

Responsible and sustainable governance at ESCO Technologies is the foundation of our commitment to long-term value creation.

Board of Directors

ESCO's Board of Directors is ultimately responsible for the management and oversight of the company. Our CEO Victor L. Richey also serves as Chairman of the Board. His dual guidance allows ESCO to speak with one voice and improves the clarity of leadership roles and responsibilities. Of the directors, six of eight are independent of ESCO management.

Detailed information regarding the composition of our board of directors is available on the ESCO website through our [Investor Center](#).

ESCO's Corporate Governance Guidelines detail the roles, responsibilities and expectations we have for our Board. These include:

- Board Composition
- Functions of the Board
- Board Meetings
- Board Committees
- Board Compensation
- Selection of New Directors
- Management Succession and Review

Our Board of Directors has four standing committees:

1. Executive Committee
2. Nominating and Corporate Governance Committee
3. Audit and Finance Committee
4. Human Resources and Compensation Committee

Only our non-executive, independent directors can serve on a Board committee, with the exception of the Executive Committee. Our Nominating and Governance Committee is responsible for periodically reviewing our corporate governance policies and actions, including any items pertaining to sustainability, and recommending any changes to our full Board.

Management Team



Corporate Resources

[2017 Annual Report & Form 10-K](#)

[Board of Directors](#)

[Management Team](#)

[Corporate Governance Guidelines](#)

[Audit & Finance Committee Charter](#)

[Human Resources & Compensation Committee Charter](#)

[Nominating & Corporate Governance Committee Charter](#)

[2017 Proxy Statement](#)

[FAQs](#)

Day-to-day management at ESCO is the responsibility of the senior management team. Our general focus areas are Financial and Reporting, Legal and Compliance and Operational and Strategic. The entire senior management team is responsible for monitoring risks that could affect our progress towards innovation, market leadership and expansion. ESCO management regularly advises our Board of Directors on potential risks identified and our plan to mitigate or minimize these risks.



Victor L. Richey (center) Chairman, Chief Executive Officer and President
Gary E. Muenster (left) Executive Vice President and Chief Financial Officer
Alyson S. Barclay (right) Senior Vice President, Secretary and General Counsel

Sustainability Council

In 2017 we created the ESCO Sustainability Council to provide high-level leadership and strategic focus for our corporate-wide sustainability efforts. Each company president was asked to nominate individuals able to address the key sustainability-related issues we identified in our initial materiality assessment. That assessment, as detailed in our FY2016 report, identified the following 8 issues:

- Ethics & Compliance
- Innovation & Technology
- Supply Chain Practices
- Human Capital Management
- Workplace Health & Safety
- Energy Consumption & Greenhouse Gas Emissions
- Water
- Waste

This year we developed our first corporate-wide sustainability survey, which gathered information from each subsidiary regarding their ongoing sustainability-focused programs and identified opportunities for future actions. Members of the Sustainability Council from each subsidiary provided the information which was used to prepare this report.

As seen in our report, we are taking action in each of these areas and are proud to report on our accomplishments. As we build upon our sustainability program, we will revisit this list of topics regularly to establish baselines, set goals and guide our efforts as we continue to pursue long-term, sustainable growth.



2017 SUSTAINABILITY REPORT

Ensuring a culture of responsibility, integrity and accountability across our organization and promoting ethical behavior.

Courtesy of Navy.mil

Ethics & Compliance

"Doing the right thing" is central to who we are as a company. It drives our decision making at all levels and it is a non-negotiable element of what we expect from our employees. From senior management to entry-level employees at our subsidiaries, the ultimate responsibility for ethical behavior and compliance with the ESCO Code of Business Conduct & Ethics resides with each and every one of our employees.

Management of Ethics and Compliance

Instilling a culture of ethical decision making and compliance with our expectations and applicable regulations begins with high-quality training. ESCO and its subsidiaries provide information and training programs that include:

- [Code of Business Conduct & Ethics](#).
- Anti-harassment and anti-discrimination
- Ethical decision making and ethical values

Each year every employee receives a copy of the Code of Business Conduct & Ethics and certifies by signature that they have received the handbook and read the contents. We also require employees to watch an ethics training video reinforcing our principles. We are currently producing a new, updated ethics video that includes a general overview of our Code and contains interviews with our CEO, General Counsel, and Vice President of Human Resources. The new video will be closed captioned in languages appropriate to our locations and will replace our current ethics training video and be required viewing for all our employees.

For day-to-day management of our Ethics program, we have a host of personnel providing guidance. These include ESCO's General Counsel, Vice President of Human Resources, the ESCO Ethics Ombudsman and ESCO Corporate Ethics Committee as well as Ethics Officers at each of our subsidiaries. Our employees are encouraged to direct any questions to anyone within the chain of command at their subsidiary, their local Human Resources departments, local Ethics officers or any of the ESCO employees listed above. There is also a confidential, anonymous Ethics Hotline. We believe that providing multiple channels for points of contact makes it more likely that employees will raise potential ethics concerns. Our CEO discusses the importance of ethics at every employee presentation and stresses his expectation for all employees to conduct business with the highest ethical conduct and to raise any issues. The ESCO Corporate Ethics Committee meets regularly, reviews every issue raised and provides regular reports to the Board.

Additional information and specifics regarding mechanisms for employees to report concerns regarding ethics issues, and general information about the policies and codes that guide our work include:



Corporate Resources

[Code of Business Conduct & Ethics](#)

[Code of Ethics for Senior Financial Officers](#)

- [The Code of Business Conduct & Ethics;](#)
- [The Code of Ethics for Senior Financial Officers;](#)
- [The ESCO Vendor Code of Conduct.](#)

In 2018, we will continue to align all ethics-related requirements and training to ensure consistency in enforcement across all ESCO operating units and subsidiaries. Particular attention will be given to integrating recently acquired subsidiaries into ESCO's systems and culture regarding ethics and compliance.

Ethics Across ESCO

The ESCO's Code of Business Conduct and Ethics outlines expectations in the following areas:

- Prohibition of conflicts of interest
- Protection and proper use of ESCO assets
- Duty to act with integrity and deal fairly when representing the company
- Prohibition of improper political payments
- Duty to comply with applicable laws including insider trading, antitrust, export controls, trade embargoes and anti-boycott
- Duty to ensure all public disclosures by the Company are full, fair, accurate and timely as required by securities laws and to maintain accurate financial records
- Duty to comply with applicable employment and safety policies
- Duty to report suspected non-compliance

Many of our subsidiaries manufacture products or operate in sectors that are subject to a high-degree of regulation and oversight. Some products are prohibited from being exported to certain parties or countries, thus requiring a high-level of control and diligence to ensure compliance with all applicable regulations. Each subsidiary is responsible for recognizing the regulatory landscape in which it operates, and for understanding the requirements that it must meet to stay in full compliance with all applicable laws related to its industry and products. For subsidiaries who ship products internationally, each has designated personnel who are responsible to stay abreast of applicable laws, manage exports and screen shipments against appropriate "denied party lists" to ensure ESCO products are not sold to ineligible customers.

ESCO subsidiaries also have processes and procedures to perform appropriate due diligence and vetting of their suppliers and third-party sales agents to ensure that such business partners operate their businesses with the highest ethical standards. These processes may include site visits, background checks or other actions necessary to verify the qualifications and integrity of such business partners. These business partners are also required to sign the ESCO Vendor of Business Conduct and the ESCO Anti-Bribery and Foreign Corrupt Practices Act Compliance Policy, as applicable.



GOVERNANCE
& APPROACH

ETHICS &
COMPLIANCE

INNOVATION &
TECHNOLOGY

SUPPLY CHAIN
PRACTICES

HUMAN CAPITAL
MANAGEMENT

WORKPLACE
HEALTH & SAFETY

ENVIRONMENTAL
FOOTPRINT

2017 SUSTAINABILITY REPORT

Providing unique, creative and forward-thinking solutions to our customers that differentiate us as an industry leader.

Innovation & Technology

ESCO's success is based upon manufacturing highly engineered, high quality products and leveraging technology and innovation to continually improve upon our products for the benefit of our customers. We strive to be at the forefront of research and new developments and to be at the cutting edge with new and innovative products. This requires a commitment to investment in infrastructure and management systems to ensure that our products continue to evolve to meet or exceed our customers' expectations.

Investing in Research & Development

Our commitment to innovation is demonstrated, in part, by our ongoing financial investment in company and customer sponsored research and development which totaled \$16 million in FY2017. Detailed information about our subsidiaries' research and development activities and investments can be found in our [2017 Annual Report & Form 10-K](#).

Driving Sustainable Performance

Each ESCO subsidiary focuses on developing its products and solutions to provide customers with enhanced functionality, new capabilities and, in many cases, more sustainable performance. Our customers come from a wide variety of sectors including aerospace, electric utilities, consumer electronics/wireless, healthcare, military, and industrial markets. Each sector has a unique set of product requirements and it is our job to understand their requirements and develop solutions that meet their demanding expectations.

While improved product quality and enhanced performance are central to our innovation efforts, we are especially interested when our products or the processes used to manufacture them also deliver improved environmental, health and/or safety performance.

The topic of sustainable design and finding ways to better document and communicate the sustainability benefits of our products will be a focus for ESCO in the years to come.

Product Innovation

Each ESCO subsidiary innovates differently, but each devotes significant time and energy to the research and development of technologies that are pertinent to its own methodology and business. These investments improve efficiency, sustainability, cost effectiveness, and help keep ESCO on the forefront of emerging technologies and



Corporate Resources

[2017 Annual Report & Form 10-K](#)

Company Portfolio

[Crissair](#)

[PTI](#)

[Westland](#)

[Mayday](#)

[VACCO](#)

[ETS-Lindgren](#)

[Doble](#)

[NRG](#)

[Morgan Schaffer](#)

[TEQ](#)

[Plastique](#)

practices. Many of these innovations result in reengineered products that help reduce energy consumption and improve energy efficiency. Some of our recent successes include the following:

Filtration/Fluid Flow

In collaboration with its supply chain, PTI has been working to improve the filtration and shelf-life performance of its media by updating the binder systems to more sustainable alternatives. PTI is also exploring new developments in cast aluminums and the additive manufacturing of aluminum, stainless steel and titanium to make near net shape components, thus shortening manufacturing cycles, and simultaneously reducing electricity, water/coolant usage and material waste from machine turnings.

VACCO is continuously researching new materials that have less or minimal environmental toxicity. VACCO's aerospace products often end up burning up in the atmosphere upon reentry from space or at the bottom of the ocean; therefore, VACCO recognizes that minimizing impact to the environment is critically important. Some of VACCO's innovations include prohibiting and/or avoiding harmful materials such as toxic propellants, Cad plating, Chromium based coatings or plating, Beryllium or other materials that emit toxic fumes when machined. VACCO is also a member of the American Institute of Aeronautics and Astronautics (AIAA). As part of this group, VACCO is on a committee to promote the use of electric propulsion systems in space to both reduce the size and complexity of spacecraft and eliminate the need for toxic propellants.

Crissair focuses its efforts on product longevity and durability of materials, and designs its products to last for the lifetime of the aircraft in which they are installed, thus reducing overall lifecycle impacts.

Utility Solutions Group

Doble's products play a central role in monitoring and maintaining the reliability of electrical grids, ensuring that they work as efficiently as possible. For example, dobleARMS® is a Doble product that consists of an asset risk management system that provides intelligent alerts and notifications that allow utilities to remotely monitor high risk and high value assets. Utilities can now make more informed decisions regarding day-to-day and longer-term operations to maximize asset longevity. Doble has also recently introduced the M7100 High Voltage Asset Analyzer which significantly improves the safety and efficiency of field work by automating multiple tests that were previously performed by several pieces of equipment, thus reducing the manpower necessary to perform the testing and the testing time from 7 hours to as little as 1.5 hours. This new product also reduces the number of technician ladder trips, thus improving workforce safety and efficiency.

Technical Packaging

TEQ is currently working with suppliers to develop TEQconnex, which will significantly reduce processing energy consumption by allowing the use of uncoated Tyvek in packaging, adding to the recyclability of both rigid trays and their lidding material while improving the breathability of the lidding. TEQ expects to implement TEQconnex by 2019.

Process Innovation

Sustainable products are the result of both environmentally friendly materials and safer, more efficient processes used to manufacture those products. Our subsidiaries continue to seek process improvements that will result in reduction of our carbon footprints.

For example, TEQ designs its packaging solutions to have the smallest possible footprint to reduce the amount of plastic utilized in production. TEQ's products are also designed to be nestable, resulting in lower overall size and volume for shipping and lower energy usage. Plastique is at the forefront of process innovation with its pulp based packaging which is a more sustainable alternative to plastic. Plastique's "Fibrepack" packaging solution is recyclable and produced from renewable virgin wood fibers sourced from locally managed forests with full chain of custody certification. This natural and sustainable material is easily recycled, biodegradable and non-toxic, and offers significant storage and transport savings compared to foam packaging parts.

NRG has automatic fans and lighting in its spray booths, which activate as needed and then turn off when not in use, thereby minimizing the use of energy. ETS-Lindgren is in the process of transitioning to more sustainable paints, adhesives, coolants and other process chemicals to reduce its environmental impact and minimize health and safety risks to its employees. In many cases, our subsidiaries have been able to eliminate harmful materials such as lead from their processes and substitute more sustainable alternatives.

Advancing Industry Standards

Employees from many of ESCO's subsidiaries serve on industry standards boards which influence industry trends and technological developments. Our subsidiaries also engage with their customers to collaborate on product enhancements and solutions. Doble hosts its annual International Conference of Doble Clients, which boasts approximately 1,400 attendees each year. Conference presentations include research on new topics such as aging infrastructure in the utility industry. These activities allow the ESCO companies to stay at the forefront of product improvement initiatives that benefit our customers.

Intellectual Property

ESCO's business is driven by our technological advancements. We are careful to protect our intellectual property to maintain a competitive market position. Our subsidiaries maintain and pursue patent protection and other forms of intellectual property for products and processes that differentiate ESCO from our peers. For example:

- Our Test segment holds a number of patents on products for wireless device testing. This segment has also sought protection for inventions such as window designs, unique antennas and improved acoustic techniques for sound isolation.
- VACCO has proprietary manufacturing technology regarding its quieting technology used by U.S. Navy submarines.
- Doble is pursuing patent protection on improvements to its line of diagnostic equipment.
- Our Technical Packaging segment has a number of proprietary products and trade secrets including technology for producing high-quality thin-wall packaging from sustainable virgin crop fibers and pulp.



2017 SUSTAINABILITY REPORT

Managing our supply chain to promote responsible behavior and reduce impacts from sourcing raw materials.

Supply Chain Practices

At ESCO, we see the diversity of our markets and corresponding supply chain as a strength. Leveraging our widespread reach, we use our processes for supply chain management to promote sustainability, increase transparency regarding conflict mineral use and create positive change throughout our supply chain.

Each ESCO subsidiary uses [ESCO's Transparency in Supply Chain Disclosure](#), which outlines our commitment to refrain from doing business with any vendor we know to be involved in human trafficking or slavery. The [ESCO Vendor Code of Conduct](#) explicitly details the standards we expect all suppliers and third party agents to meet and is supported by periodic assessments to guarantee compliance. These requirements include:

- Compliance with anti-corruption laws
- Compliance with fair competition laws, Environmental Health & Safety (EH&S) regulations, trade controls and export/import requirements
- Maintaining a professional demeanor
- Refraining from offering gifts, bribes or other incentives
- Respecting ESCO's intellectual property rights
- Honestly billing for products and services
- Refraining from public communications about ESCO unless authorized
- Sharing ESCO's commitment to human rights and fair labor

Our subsidiaries have the responsibility to ensure that their vendors meet these expectations, and each has processes and procedures to monitor their vendors. For example, ETS ensures accountability of suppliers by conducting internal reviews of critical production suppliers and periodically evaluating its installation services providers to ensure that safety and quality requirements are met.

Conflict Minerals

Eliminating conflict minerals is a complex endeavor, but like other large companies, ESCO has the opportunity to leverage relationships with our thousands of suppliers and lead the way to fair extraction of all minerals. We collaborate with our suppliers to identify and monitor the procurement of products that may contain minerals sourced from the Democratic Republic of Congo and adjoining regions where the extraction of these minerals is often associated with human rights abuses.

In collaboration with suppliers, we use a five-step approach to conflict minerals management:

- Establish strong company management systems
- Perform due diligence on the sources of our suppliers'



Corporate Resources

[ESCO Conflict Minerals Policy](#)

[ESCO Conflict Minerals Report for 2016](#)

[ESCO Transparency in Supply Chains Disclosure](#)

- Identify and assess risks in the supply chain
- Design and implement a strategy to respond to identified risks
- conflict minerals
- Report annually on supply chain due diligence

Our [Conflict Minerals Policy](#) specifically outlines ESCO's expectation that all suppliers cooperate in this effort, and our commitment to thorough review and transparency. ESCO annually requests its' suppliers to provide information about the smelters and refiners from which they source conflict minerals. ESCO's annual [Conflict Minerals Report](#) includes a list of the smelters and refiners identified by our suppliers and whether they have been certified as third-party conflict free.

Supplier-Customer Relationships

Customers are an increasingly important driver of our sustainability programs. ESCO counts many of the world's largest and most well-known companies among its customers, and they are becoming increasingly rigorous in what they require from their vendors. We are regularly asked for data by our customers regarding our environmental, labor, quality and health and safety programs and practices, and many government contracts require a certain level of assurances and documentation about how we conduct business. In general, transparency and accountability are of paramount importance in our relationships with our customers.

For example, certain European customers of PTI, Crissair, ETS, and Mayday-Hi-Tech ask us to comply with the European Union's REACH regulation. Other customers of TEQ/Plastique have sent surveys requesting energy consumption, carbon emissions, and water usage information, which we willingly provide. Beyond information sharing, Crissair also accommodates customers who require minimal packaging to reduce waste while engineers at Doble utilize product specifications provided through the formal Engineering Control Notification process to design products that take sustainability into account. These examples showcase the dedication of each of our subsidiaries to the administration of a balanced, responsible and change-making supply chain.



GOVERNANCE
& APPROACH

ETHICS &
COMPLIANCE

INNOVATION &
TECHNOLOGY

SUPPLY CHAIN
PRACTICES

HUMAN CAPITAL
MANAGEMENT

WORKPLACE
HEALTH & SAFETY

ENVIRONMENTAL
FOOTPRINT

2017 SUSTAINABILITY REPORT

Developing a talented and engaged workforce to continue expanding our abilities to innovate and serve our stakeholders.

Human Capital Management

Our employees are an engaged, well-trained and conscientious team who embody our dedication to doing the right thing for our business, for each other, and for the community.

Our workforce of approximately 3,000 associates, 94% of whom are permanent employees of ESCO or its subsidiaries, bring a wide range of skills to their jobs in the 22 countries where we operate. We count on our employees to share their knowledge and we are committed to helping them grow and develop their skills. We proactively identify employees who demonstrate high leadership potential and we have programs in place to nurture them and grow them into the future leaders of the business. This is particularly important when we acquire new businesses and must efficiently integrate new people, management systems and product lines into the ESCO family.

We recognize that an engaged workforce directly contributes to our efforts to improve our sustainability performance, as employees are inspired to do more if they identify with, and feel good about the organization's business mission. In a highly competitive recruitment market, an organization who develops their employees, tracks performance results, recognizes high performers, and offers competitive compensation and benefits will attract and retain the talent needed for sustained organizational growth.

Employee engagement is central to our success. We work hard to ensure that employees are encouraged to offer, and are rewarded for, their input on business processes and management as this leads to higher engagement and productivity. Through a variety of mechanisms, such as athletic and wellness activities, birthday and lifecycle celebrations, service awards and social events we seek to build a strong sense of community, to demonstrate our commitment to work-life balance and the wellbeing of our employees and their families.

Our subsidiaries use several methods to track the success of our Human Capital management programs. These include surveys, cross-departmental committees (Wellness, Safety, Voice of Employee), sharing of ideas, resources and best practices and offering trainings and leadership development opportunities. For example, ESCO hosts an annual ESCO-wide Human Resources Conference and a bi-annual Controllers Conference where the HR and Finance teams from each subsidiary get together to share information, discuss challenges, and develop new plans. We have found these events to be very valuable components of our Human Capital Management efforts.

Recruiting High-Potential Talent

A high-performance business requires high-performing people. ESCO uses a variety of mechanisms to recruit individuals with strong technical skills, the ability to learn quickly and who can immediately contribute to our success. The recruiting market is competitive, and the ESCO companies communicate job openings in ways seeking to reach across



Corporate Resources

ESCO Technologies
Foundation

Careers

cultural and generational differences. We use traditional outlets such as recruiters and job boards and also use social media and other internet platforms.

We also seek to give opportunities to individuals who might have limited access to learn about opportunities with our companies. For example, VACCO, Westland and PTI have programs with local high-schools and at-risk youth organizations where we introduce students to the wide range of career options available in the ESCO companies and give them an opportunity to shadow employees and see firsthand what employment in the high-technology sector can offer. PTI and Doble have specific programs to recruit military veterans.

Employee Training

Each of our subsidiaries seeks to provide onboarding and ongoing training opportunities. Onboarding programs including matching new hires with experienced employees who coach them through their new responsibilities. Every ESCO employee is required to participate in regular ongoing training such as annual courses on ethics and harassment. Other employee training is dependent upon the employees' job responsibilities. Engineers and production employees receive specialized training including various manufacturing related programs. Managers receive leadership, finance, program management, sales and marketing training. Customer facing employees receive customer service and/or sales training. We also partner with local technical schools and community colleges to augment in-house training programs.

Each ESCO subsidiary seeks to continually develop and grow the skills of its workforce through a variety of training programs, customized to their businesses and their employees. For example, ETS employees have access to over 10,000 learning videos and courses related to core competencies for all roles in an organization. TEQ is in the process of developing "TEQ University" for job-specific technical training for its employees. NRG has an onsite training program to certify climbers of wind turbines. Most subsidiaries maintain a training matrix program that allows managers to review what trainings employees have participated in and identify additional training opportunities. Most also offer lunch and learn seminars on various business and personal topics which seek to give employees continuous opportunities and access to information to improve themselves professionally and personally.

Leadership Development

ESCO seeks to recognize and develop employees who have leadership potential and give them opportunities to take on larger responsibilities. Each ESCO subsidiary has a program to identify, guide and develop the leadership and technical skills of high-potential employees. For example, in 2017, VACCO sent 23 first time Managers and Supervisors to a two-day training program to further their leadership and managerial skills. A selection of supervisors and managers also participated in courses including a 5-week Supervisory Skills Course and a course on Interviewing Skills and Leading People. Five members of the ESCO Executive team received management coaching and one Executive team member participated in a Top Gun Leadership seminar.

We recognize that effective leadership requires self-reflection and critical assessments of our capabilities as leaders. This past year, we adopted the Leadership Circle method to explore leadership potential and leadership effectiveness. This approach involves using a 360-degree stakeholder survey for several of our senior leaders as well as our leadership cohorts. Three leadership groups met over the course of 2017 as part of this program.

In 2018, we will continue to assess the current training and development needs of our employees and research new options for enhanced training programs for management and leadership. We also plan to conduct a Leadership Culture Survey.

Employee Compensation & Benefits

We are committed to paying our employees competitive and fair compensation that is commensurate with their tenure, position and performance and is consistent with the market in their location. We conduct regular surveys of the market rates for jobs to ensure that our compensation is competitive. We offer annual merit-based increases as well as cash incentives for high-performing and high-potential employees. We offer a 401(k) plan and have an above-average participation rate. We have a comprehensive benefits package including medical, vision and dental insurance for which we contribute a substantial portion of the premium cost. We offer tax savings through plans which allow employees to pay for medical costs and dependent care with pretax dollars. We offer an employee stock purchase plan with a matching contribution to all full-time US-based employees. We are proud to report that our turnover is significantly lower than the industry averages and we have many very long-term employees.

Giving Back to the Community

In 2006 we established the [ESCO Technologies Foundation](#), dedicated to providing financial support to charities and others in need, focusing on children and families in communities where ESCO has operations. Our employees are also engaged in volunteer efforts to support many of the organizations selected to receive grants. The Foundation also offers programs that award college scholarships to the children of ESCO employees and grants to support employees facing extreme hardships. The Foundation is supported by donations from our employees, ESCO Technologies and outside donations. To date, the Foundation has given approximately \$2.6 million to support our local communities.

In addition to the Foundation, ESCO and each of its subsidiaries have programs to support other charitable needs. These include food, clothing and blood donation efforts, hurricane and other disaster relief programs, tutoring, home-building and many other group volunteering and donation events. Some of our subsidiaries offer paid time-off to employees to participate in volunteer opportunities.



2017 SUSTAINABILITY REPORT

Protecting our employees every day and supporting healthy lifestyle practices that enable our teams to thrive.

Workplace Health & Safety

Creating a Safe Working Environment

We are committed to employee safety at all ESCO facilities. Our corporate headquarters has a designated person tasked with oversight and monitoring of appropriate safety programs for all subsidiaries. Through employee training and continuous improvement, we strive for a zero-incident environment. We have equipment and procedures to protect employees in their work and we train employees on proper safety protocols. Each ESCO subsidiary has a designated safety supervisor and formalized safety programs. Two of our newest subsidiaries, Mayday and Hi-Tech recently hired a full-time safety manager and initiated a formal safety committee.

Our health and safety programs must comply with applicable local, state and federal safety laws and regulations. Our corporate team periodically performs environmental, health and safety compliance audits at our subsidiaries. This includes reviewing OSHA protocols for the following:

- Training records
- Machine guarding
- Emergency planning
- Egress
- Injury recordkeeping
- Personal protective equipment
- Audiometric programs
- Forklift safety
- Electrical safety
- Lockout tag out
- Hazard communication
- Emergency action plans
- Cranes and hoists
- Spray booths
- Respiratory protection
- General housekeeping

In addition, as required in our facilities and processes, we monitor air quality to ensure that we maintain exposure to dust, fumes, chemicals and/or hazardous substances below OSHA-mandated levels. VACCO continuously monitors its manufacturing area to ensure that its oxygen levels and other hazardous gases are within permissible ranges. VACCO has a security system with audible and visual alarms if the oxygen levels reach a level which could indicate an inert gas leak. This system also monitors alcohol, acid and combustible gases in the manufacturing area. PTI Technologies, was recognized by Cal OSHA with its Golden Gate Partnership Recognition/Certificate for its efforts in implementing and maintaining an effective injury and illness prevention program.

Our insurance carrier is also an active partner in helping us keep our facilities safe. Inspectors periodically visit our locations to ensure that our fire protection systems are operable and meet current requirements based on fire ratings. They also perform tests of our alarm systems, inspect our pressure vessels for integrity and check that we meet seismic requirements for fire protection piping and natural gas lines.



Corporate Resources

2017 Annual Report
& Form 10-K

Training/Monitoring

All factory employees are required to undergo mandatory safety training. Certain facilities offer extra CPR/First Aid/AED (Automated External Defibrillator) training classes throughout the year while others offer substantially expanded MERT programs (Medical Emergency Response Team). VACCO conducts annual health monitoring testing and a hearing conservation program for employees who are exposed to higher level of noise.

Our Safety Committees meet regularly and monitor safety issues and incident reporting. They look for root causes to remedy situations, believing that safety issues are usually indicative of a problem with the underlying process and not the fault of an individual person. We are consistently impressed by the innovation of our subsidiaries in training and monitoring employee health and safety in the workplace.

VACCO has a 'Code Blue' team for medical emergencies. This team consists of 40 volunteer members who are trained in First Aid, AED and CPR. VACCO provides annual training to Code Blue members at no cost. All VACCO facilities are equipped with AED machines and First Aid supplies. The Code Blue team has responded to many medical emergencies such as illness and injuries, but most notably, the team members saved the life of an employee who suffered a heart attack on the job last year. Paramedics that treated the individual stated that the employee would not be alive today if it hadn't been for the trained employees of 'Code Blue.'

VACCO has 15 members on a Hazmat team who each have 40 hours of specialized training and an additional 8 hours annual refresher training. The Hazmat team members' responsibilities include responding to non-incident emergency spills, bulk chemical handling, and responding quickly and effectively to an emergency evacuation.

Employee Wellness

ESCO believes that when our employees are healthy, our employees and our businesses thrive. Nearly ten years ago, we implemented a corporate wellness program to offer our team opportunities to follow a healthy lifestyle. The majority of our subsidiaries have wellness committees that champion these efforts. Our wellness programs are a source of pride for our companies. Our programming includes:

- Fitness challenges such as "Maintain – Don't Gain" and other programs
- Classes such as lunch and learns, yoga and meditation
- Health fairs at corporate and subsidiary locations
- Volunteering and participation in events such as fundraising walks/runs/rides and other events in support of charitable organizations

The programs are tailored to the interests of the employees at each location and therefore activities vary by subsidiary. For example, PTI deployed 40 stand up desks to employees and provides them upon request, while ETS hosts onsite yoga every Friday and a quarterly "Healthy Cooking Challenge." VACCO's initiatives include offering meal vouchers to employees as an incentive for its rideshare program as well as a free subscription to "Family Safety and Health" magazine to keep employees and their families educated on various safety and health topics. We also offer an Employee Assistance Program to help employees deal with personal concerns affecting home or work life.



GOVERNANCE
& APPROACH

ETHICS &
COMPLIANCE

INNOVATION &
TECHNOLOGY

SUPPLY CHAIN
PRACTICES

HUMAN CAPITAL
MANAGEMENT

WORKPLACE
HEALTH & SAFETY

ENVIRONMENTAL
FOOTPRINT

2017 SUSTAINABILITY REPORT

Understanding our impact to enhance operational efficiency and conserve resources across our operations.



Environmental Footprint

Defining and mitigating our impact on the environment is the most critical aspect of our sustainability performance. Last year we issued our first sustainability report, following our first comprehensive, company-wide survey of our energy consumption and greenhouse gas emissions, which gave us a baseline from which to assess our future performance.

Each ESCO subsidiary has designated certain employees to serve on the ESCO Sustainability Council. The Sustainability Council is responsible for energy management, development and implementation of energy efficiency initiatives, and tracking progress against goals. By delegating responsibility in this manner, each subsidiary has the flexibility to address initiatives unique to its circumstances and requirements, and to leverage opportunities that are specific to its location. Moving forward, we will explore opportunities to share best practices so that our subsidiaries can learn from one another in areas such as technological developments, improved processes, consumption strategies and carbon offsetting.



Corporate Resources

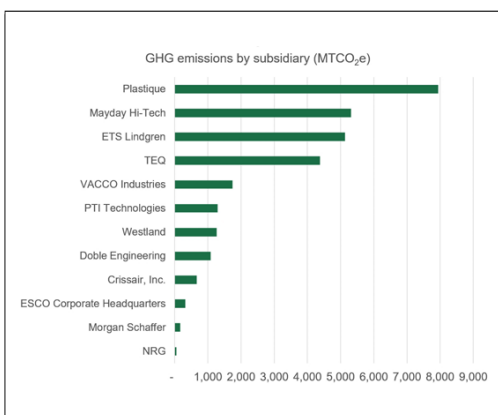
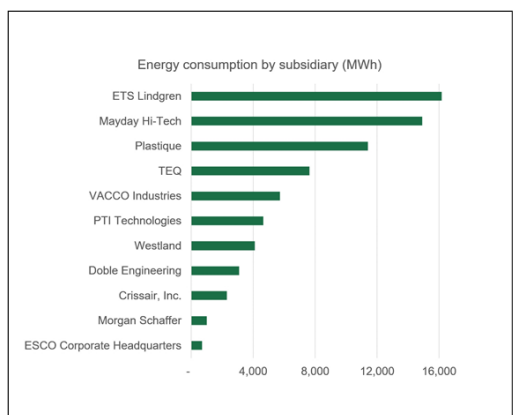
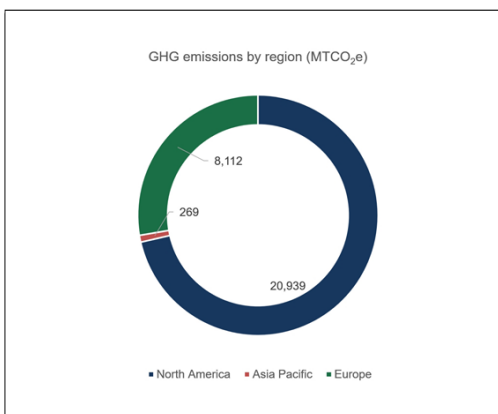
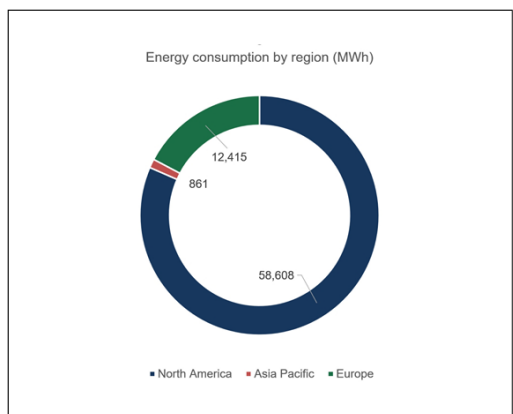
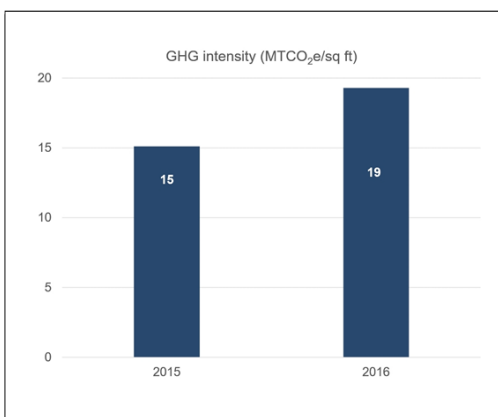
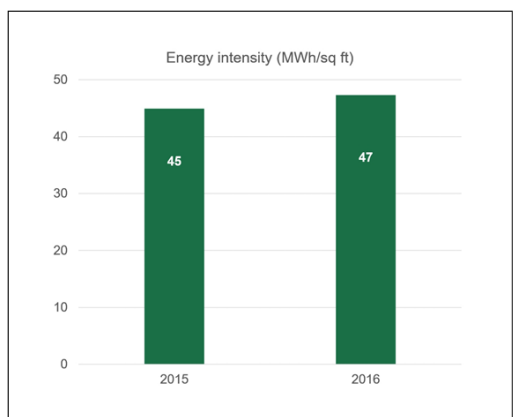
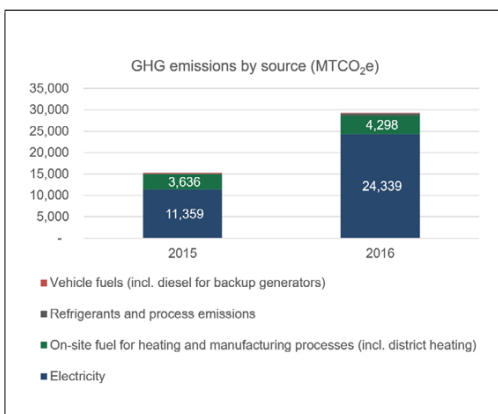
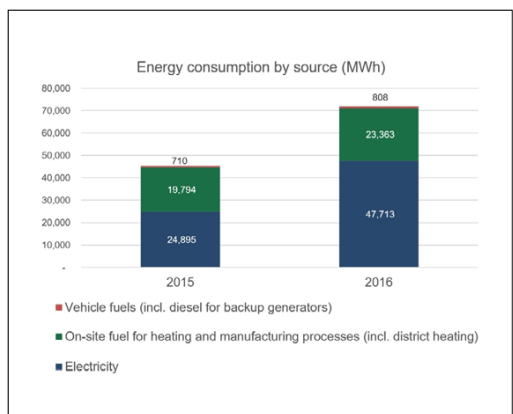
2017 Annual Report
& Form 10-K

Environmental Management at ESCO

This year we again surveyed our energy consumption and calculated our greenhouse gas emissions, and also measured, for the first time, our use of water, giving us a baseline against which to monitor our progress. Moving forward, we will continue to quantify and monitor use of these resources and seek ways to reduce our impacts in each of these areas.

Energy Consumption & Greenhouse Gas Emissions – The Numbers

This report presents our second comprehensive inventory of ESCO's energy usage and carbon footprint with data for Calendar Year 2016. We are reporting on all ESCO facilities that have 5,000 or more square feet which includes our 27 largest facilities located in the United States, China, Finland, India and Norway. The data reflects our usage of electricity consumption, on-site fuel consumption for heating or manufacturing, and vehicle fuels.



In 2016, we expanded the geographic scope of our environmental data collection to include seven new sites that were recently acquired by ESCO. Adding these sites resulted in a 50% increase of the total floor area included in our analysis. ESCO's total energy consumption amounted to ~72,000 MWh in Calendar Year 2016, a 60% increase over 2015 figures. More than 66% of this consumption was attributed to electricity. The second largest source is on-site fuel consumption used for heating and manufacturing processes.

The majority of the increase in energy usage and GHG emissions between 2015 and 2016 is attributable to the acquisition of two new subsidiaries, Mayday and Plastique, that both utilize energy intensive manufacturing processes. However, this increase was partially offset by significant energy usage reductions at ETS Lindgren. This is demonstrated by that fact that, despite adding energy intensive businesses to our portfolio, the overall energy intensity of our portfolio, measured in terms of MWh per square foot of facility space, stayed essentially constant from 2015 to 2016. This indicates that the efficiency with which energy is used was roughly equal between 2015 and 2016, despite ESCO's substantial growth.

Our total GHG emissions amounted to ~29,000 metric tons of CO₂ equivalent (MTCO₂e) in Calendar Year 2016, a 92% increase that is attributable to the inclusion of seven new sites in the 2016 inventory. Greenhouse gas emissions intensity also increased by ~25%, due to the fact that the facilities that were included in the emissions inventory for the first time in 2016, are located in regions where electricity generation is substantially more carbon-intensive.

At the regional level, North America was the biggest energy consumer and producer of GHG emissions in Calendar Year 2016 (21 sites representing 89% of floor area included in the analysis). Furthermore, four new European sites were added to the data collection process in Calendar Year 2016, causing Europe to become the second largest consumer of energy and producer of ESCO's total GHG emissions.

Energy Consumption (MWh)	2015	2016
Electricity	24,895	47,713
District Heating	874	901
Heating Fuels	18,920	22,462
Heating Oil	190	304
Natural Gas	18,712	21,984
LPG/Propane	18	174
Vehicle Fuels	710	808
Diesel	87	374
Gasoline	483	326
LPG/Propane	140	108
Total Energy Consumption	45,399	71,884

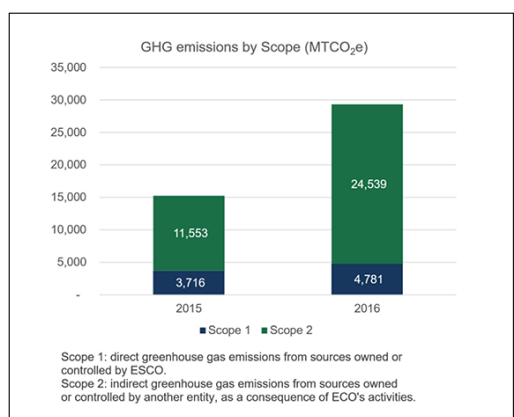
GHG Emissions (MTCO ₂ e)	2015	2016
Direct Greenhouse Gas Emissions (Scope 1)¹	3,716	4,781
Heating Fuels	3,442	4,098
Vehicle Fuels	167	195
Refrigerants and Process Emissions	107	488
Indirect Greenhouse Gas Emissions (Scope 2)²	11,553	24,539
Electricity ³	11,359	24,339
District Heating	194	200
Total GHG emissions⁴	15,269	29,321

¹Scope 1: direct greenhouse gas emissions from sources owned or controlled by ESCO

²Scope 2: indirect greenhouse gas emissions from sources owned or controlled by another entity, as a consequence of ESCO's activities

³The greenhouse gas emissions associated with electricity consumption are reported according to the «location-based» approach, as defined in the Greenhouse Gas Protocol Scope 2 Guidance. Value used as an approximation for the «market-based» emissions.

⁴Greenhouse gas inventory calculated in accordance with the WRI/WBCSD Greenhouse Gas Protocol



Our efforts to conserve energy and reduce GHG emissions have focused on modifications, upgrades and improvements to our facilities and to our manufacturing processes. Members of the Sustainability Council at each subsidiary have led the charge to develop and implement these initiatives. We are proud to report on these activities and look forward to continuing to build upon our progress and find new ways to improve the sustainability of our businesses in the years ahead.

NRG Systems, Inc.

In 2017, our sustainability efforts took a great leap forward with our entry into the renewable energy industry through our acquisition of Vermont-based NRG Systems, Inc. (NRG). NRG is a global leader in renewable energy technologies and the market leader in providing Wind Resource Assessment Tools. NRG's mission is to shape the future with smart technologies for global resource sustainability.

NRG's manufacturing facility in Hinesburg, VT, embodies its commitment to renewable energy and energy efficiency. The 77,000 square foot, state-of-the-art LEED Gold certified facility is powered by 100% renewable energy generated onsite. The building features solar power generation, a solar hot water system with rooftop collectors, a wood pellet heating system, radiant floor heating and cooling, demand-controlled ventilation with CO₂ monitoring, automatic daylight harvesting controls and occupancy sensors, LED lighting, and motion controlled work benches that power down when not in use. Together it is estimated these technologies help NRG avoid more than 200,000 pounds of CO₂ emissions annually.

By investing in advanced technologies and powering the building with renewable energy, NRG has minimized its environmental impact and essentially prepaid its energy bill for the long term. People from around the world have studied and taken tours of the facility to learn more about how to develop and create a sustainable work environment. More details about the facility can be found here: www.nrgsystems.com/about/sustainability

Environmental stewardship is central to the culture at NRG. Employees are encouraged to "live lighter" and are supported in doing so by reimbursements of up to \$500 per calendar year to use public transit, purchase electric/hybrid vehicles and charging stations, install solar and wind equipment, have home energy audits, and purchase composting and gardening supplies, Energy Star rated appliances, HVAC systems, light fixtures and bulbs, and other building products.

NRG is also a member of the Vermont Businesses for Social Responsibility (VBSR), a statewide, nonprofit business association whose mission is to foster and recognize the opportunity and responsibility of businesses to set a high standard for protecting the natural, human, and economic environments.

ESCO is proud to be the parent company of NRG and to share its philosophies within the ESCO family.

ESCO Subsidiaries – Recent Facility Initiatives

There are many examples of ESCO subsidiaries seeking to reduce their environmental impacts. Highlights from 2017 include:

- Upgraded Lighting.**
 Most ESCO facilities have replaced or are in the process of replacing light fixtures and bulbs with energy efficient LEDs. Many of these subsidiaries have also put their new lighting and thermostats on automatic and/or programmable timers and motion sensors to reduce usage.
- More efficient Air Compressors/Chillers/New HVAC Equipment.**
 Crissair, VACCO, TEQ and Plastique have recently purchased new, more efficient and properly-sized air

compressors, chillers and/or HVAC equipment which use less energy. VACCO has determined that its new compressor saves 189,000 kWh energy annually.

- **Solar Panels.**

Mayday's building, constructed in 2013-14, has a 5.7 kW solar panel system. These panels provide some of the energy needed at the facility, reducing the carbon footprint and electricity usage. TEQ, PTI and Crissair are also exploring the use of solar panels.

- **Energy Assessments**

ESCO subsidiaries including TEQ, Plastique, Doble and ETS have recently engaged their local utility companies and/or consultants to perform energy assessments and identify energy reduction opportunities. Many of the recommended items have been implemented and others are in the planning stage.

ESCO Subsidiaries – Recent Manufacturing Initiatives

Energy savings also extends to optimizing manufacturing processes. Recent highlights include:

In 2016, Crissair purchased 3 new Okuma machines which increased machine efficiencies by 59%. The new machines increase capacity, minimize setup time, minimize deburring, save material waste, reduce cutting times and lower the energy footprint of each part manufactured.

Mayday manufactures and treats metal parts to customer specifications. Previously the manufacturing process started with metal bar stock as the raw material. In 2016 a new process was implemented called “Near Net Shape Castings” where raw material is cast into form using a centrifuge to more closely match the size and shape of the final product. This new process utilized less raw materials to make the products, generates less waste and scrap and reduces labor. Moreover, the supplier of the starting material purchases all the scrap and leftovers and recycles it for future use. Mayday is seeking to expand this process in its business.

Mayday employees also sit on the board of NADCAP, an organization that advocates for new processes to reduce the environmental impact of manufacturing. NADCAP is working on initiating regulatory changes which would require companies to replace the use of the chemicals Cadmium and Chromic Anodize with Zinc Nickel and Boric Sulfuric. These replacement chemicals have less environmental, health and safety impacts.

In 2016 Westland re-engineered and replaced its outdated hydraulic pump system. Under the old system, Westland used a closed loop, 6 pump, 1200 hp system containing approximately 800 gallons of oil. This system was located 400 feet away from the production line and was over 20 years old. This system was replaced with 3 new 20 HP units located within 15 feet from the production line served. Under the previous system, all pumps needed to operate regardless of how much product was being made. Now, the system runs each pump based on demand requirements instead of “full on”, resulting in significant energy efficiencies.

ESCO Subsidiaries – Recent Packaging Initiatives

TEQ and Plastique are recognized as world leaders in the packaging industry. Their thermoformed products are designed to be “nestable” to allow more efficient packing for shipment, reduce shipping costs and fuel consumption. TEQ is currently marketing TEQethylene, an HDPE (high density polyethylene, an easily recycled product) thermoplastic product to promote single material recycling of Tyvek lids and rigid trays.

Other ESCO subsidiaries are also working to employ more sustainable packaging. For example, Doble has proactively changed the foam inserts utilized in packaging to a less expensive recyclable version which will result in a significant reduction in un-recyclable packaging material. This packaging is certified by the International Safe Transit Association (ISTA). NRG has eliminated the use of bleached white cardboard in its packages and ships products in “EnviroCrates” to reduce transportation costs and packaging waste.

Water

Water usage is another environmental impact for ESCO Technologies. Understanding our total water consumption and challenging our subsidiaries to come up with unique solutions to reduce consumption is a priority for ESCO. In 2017, we collected water consumption data for the first time from our subsidiaries.

In CY2016, our total water consumption was 31.3 million gallons. The sites included in our water data collection process represent over 86% of floor area included in our scope of environmental data. In 2018 we will be working to improve the data quality and coverage.

Some existing initiatives to reduce water usage include:

- Mayday recycles water used in their metal processing activities.
- VACCO conducts quarterly preventative maintenance to reduce water leaks from pipelines.
- Westland recently upgraded their hydraulic supply system reducing cooling water consumption.
- Doble's largest contract manufacturer has a complex water recycling system that is utilized at its manufacturing facility in Florida. Thousands of gallons of water are saved every year as a result of this system.

As we better understand the unique water requirements of each subsidiary, we will be establishing consumption targets and deploying water savings technologies as feasible.

Waste and Recycling

Recycling and waste minimization are a priority for our companies. Crissair recycles cardboard, paper, and plastic, through the infrastructure provided by their waste vendor. Each workstation is provided with a trash recycle bin and training on waste reduction and recycling is included in annual ISO 14001 refresher training. VACCO recycles scrap metal with a contractor that separates the material into drums to maximize returns by material type and weight. PTI, ETS and Mayday all recycle scrap machine turnings and metal from their manufacturing processes, including high value materials such as stainless steel, copper, aluminum and titanium. Doble proactively changed their packaging foam to a recyclable version. Its disposal service company also provides a single stream collection service that sorts and recycles all materials at their facility after collection. Doble also responsibly recycles scrap electronic material, obsolete electronic equipment, and printer cartridges.

NRG recently completed a "garbage sort" with the help of an outreach coordinator from the local waste district office. This feedback will identify where we are currently doing well along with opportunities for future improvement. NRG also operates a composting program onsite.

TEQ has a program to recycle all plastic scrap generated in the manufacturing process. IN 2014, TEQ's recycling program for corrugate, paper and roll cores resulted in a reduction of landfill waste of 61%.

Hi-Tech's waste treatment electro coagulation system is unique to the plating industry. The system runs the wastewater from manufacturing operations through a rectifier which captures and binds the heavy metals which are in the waste water. This process reduces the amount of sludge and waste produced overall.

Mayday worked with the University of North Texas engineering program on a 3D printing project to create tooling. The 3D printing process builds the tooling using an additive process rather than cutting it out from raw material thereby eliminating material waste.

Westland redesigned its acid etch manufacturing process and thus eliminated the use of caustic soda. This redesign has reduced hazardous waste produced by 50%.

Transparency and Reporting

ESCO values staying transparent in our efforts, as seen through PTI, VACCO and Crissair's participation in Green House Gas reporting with the Climate Registry. VACCO has published its data annually for several years and won the Cool Planet Award in 2014 from the SCE and Climate Registry.