

The <u>Davey Tree Expert Company</u> is built upon our corporate values:



We pride ourselves on our commitment to deliver unmatched excellence in client experience, employee strength, safety and financial sustainability. As an industry leader in arboriculture, horticulture and environmental services, we remain responsible stewards of our planet's natural resources.

In 2016, we conducted a robust <u>materiality assessment</u> to identify the environmental, social and governance topics most significant to our internal and external stakeholders. These topics, which build upon our corporate responsibility (CR) pillars, serve as the foundation for our CR strategy.



Safe Business Practices

Our behaviors and actions ensure that the safety of our employees and clients is a core value of our business.

Workplace Health & Safety

Fire Prevention



Engaged Employees

As an employee-owned company, we create an environment to fully engage our employees in their work and our purpose as a company. We invest in them as they invest in us. Together, we grow personally and professionally.

Employee Attraction & Retention

Employee Education & Development



Innovative Thinking

We are leaders in leveraging our research, experience and people to address challenges facing the natural environment through product and service innovation.

Environmental Services

Innovation



Sustainable Environment

We commit ourselves to environmentally responsible practices that sustain the planet, our communities and our business. We take pride in the fact that our environmental practices can complement our business growth.

Water Management >
Energy & Emissions >
Waste & Recycling >

Throughout 2017, we began integrating our material environmental, social and governance (ESG) topics into our Vision 20/20 Strategic Plan. Our material topics not only drive our daily activities but also shape our endeavors as we work to advance the green industry.

Our Approach



About Our Company

Founded in 1880, The Davey Tree Expert Company is committed to providing our clients with the best scientifically based horticultural and environmental services in the tree care industry. For nearly 140 years Davey has been rooted in corporate responsibility—demonstrating environmental, social and economic stewardship in everything we do.

Davey is passionate about our communities' natural assets, the trees and plant life that make our world a greener, healthier and more beautiful place to live. As we work to advance the green industry, our employee owners are committed to providing solutions that promote responsible practices for the sustainability of the environment and society.

Business Segments

G4-4, G4-6, G4-8, G4-9, G4-13

Davey operates across the United States and Canada, providing a variety of tree care, grounds maintenance and consulting services for the residential, commercial, government and utility markets. Our residential and commercial services segment provides services to residential and commercial customers, including:

- The treatment, preservation, maintenance, removal and planting of trees, shrubs and other plants
- The practice of landscaping, grounds maintenance and tree surgery
- The application of fertilizers, herbicides and insecticides
- Natural resource management and consulting, environmental planning and forestry research and development

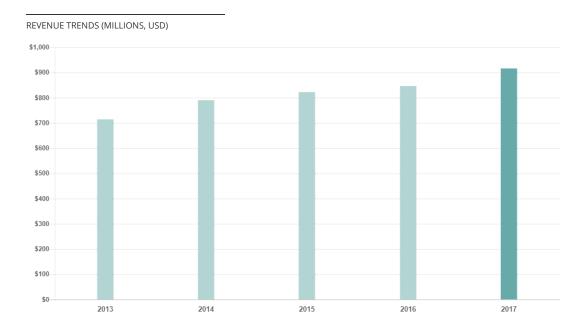
Our utility segment is principally engaged in providing services to utility customers, including Investor-owned, Municipal, REA, Co-ops, Communications and Natural Gas Utilities:

- Line-clearing and vegetation management around power lines
- Rights-of-way and chemical brush control, natural resource management and consulting, forestry research and development and environmental planning

Performance

G4-EC

A company is only as successful as its people. This sentiment rings true for Davey. We would not be in business for nearly 140 years without the dedication and hard work of our employees and employee-owners. In 2017, we continued to grow. We made notable acquisitions, including Arborguard in Atlanta, Georgia, and Arborel Tree Service in Pittsburgh, Pennsylvania, further solidifying our leadership position.



Supply Chain

G4-12

Staying true to Davey's corporate responsibility pillars requires us to consider who and how we partner with our suppliers. Davey's largest purchasing categories include equipment, insurance, fuel, chemicals and miscellaneous supplies. Equipped with the results of our materiality assessment, we have begun collaborating with several suppliers to develop innovative solutions for our mutual focus areas. For example, in 2017, we collaborated with Husqvarna to reduce our energy and emissions footprint.

Partner & Industry Leadership

G4-16

Davey partners with many organizations to advance tree stewardship and societal well-being. Some of these organizations, programs and conferences include:

- Alliance for Community Trees
- American Academy for Park & Recreation Administration
- Arbor Day Foundation
- Arboriculture Research and Education Academy
- Garden Writers Association
- International Society of Arboriculture
- Master Gardeners
- National Association of Landscape Professionals

- National Center for Employee Ownership
- Responsible Industry for a Sound Environment
- Society of Municipal Arborists
- Sustainable Urban Forest Coalition
- Tree Care Industry Association
- TREE Fund
- U.S. Forest Service
- Utility Arborist Association

Our employees devote their time, talent and leadership to these organizations, as well as other initiatives that promote and provide sustainable communities.

Awards

In recognition of our industry and community leadership and excellent client service, we received several awards in 2017, including:

- Angie's List Super Service Award
- Garden Writers Association 2017 GWA Media Awards Silver Medal Winners, Broadcast Media and Calendar categories
- Tree Care Industry Association Professional Communications Awards, flyer/ad/postcard; digital/social media; and website categories



Our Approach



CEO Letter

G4-1

Dear Valued Stakeholders,

As President and Chief Executive Officer of The Davey Tree Expert Company, I am pleased to introduce our sixth annual and first online Corporate Responsibility Report, covering Davey's performance and progress for the 2017 calendar year.

Founded in 1880, <u>Davey</u> prides itself on delivering superior tree and plant care service to our clients. Throughout North America, we continue to lead the green industry, conserving and protecting the world's natural assets while developing innovative solutions that advance the environmental sciences.

At Davey, corporate responsibility is at the core of what we do and who we are. Our four pillars provide the foundation for our CR strategy: <u>Safe Business Practices</u>, <u>Engaged Employees</u>, <u>Innovative Thinking</u> and <u>Sustainable Environment</u>. Through these four pillars, we manage our most material environmental, social and governance efforts on a daily basis and create long-term value for our business—ensuring Davey's sustainability for the next 100 years.



Safe Business Practices begin with our people—ensuring the safety of our employees and clients at the jobsite. Our employees are colleagues, friends and family, and their safety is of the utmost importance. We continuously strive to create a safer environment—for example, this year, we expanded our safety course offerings through our Learning Management System to include a <u>Factors and Forces</u> curriculum that helps field employees identify and react to the numerous causes of tree failure.

As an employee-owned company, maintaining an engaged workforce is essential to our continued success. We recognize that providing opportunities for professional and personal development helps us attract and retain the very best industry talent. In 2017 we improved our central recruiting systems by expanding our regional recruiting hubs to support utility services operations, enhancing collaboration between the hubs, Davey Resource Group and Canadian operations.

For nearly 140 years, the Davey name has been synonymous with the Innovative Thinking and the advancement of ecosystem sciences. Since John Davey published his book, The Tree Doctor, in 1901, Davey Tree has innovated and pioneered the latest in horticultural and environmental services. Today, we continue to provide solutions to some of the world's most pressing environmental challenges—from climate change to access to clean water.

At our very essence, Davey is devoted to the sustainability of our planet's natural resources. In our own operations, and through our diverse service offerings, we strive to deliver unmatched excellence as we advance the green industry. This year, we established a <u>bold goal</u> to reduce our global fleet fuel consumption by 35 percent per labor hour by 2023, from a 2017 baseline. With one of the largest corporate fleets in the U.S., we are working tirelessly to lower our carbon footprint by reducing fuel consumption and emissions, optimizing routes and promoting more efficient practices. At the same time, we are working with our clients to value, conserve and enhance their natural capital.

Davey is committed to corporate responsibility not just for our business, but for the world. We recognize that our core services center around creating healthy green spaces while contributing to a thriving environment. We promote responsible and safe practices with our clients and partners and take the time to educate the public, where possible. We invest in the continued education and development of our employees, as they are the future of our company. We're proud of our founder John Davey's innovative thinking and entrepreneurial spirit, and as an employee-owned company, we look forward to carrying on his legacy for many years to come.

I hope you enjoy exploring Davey's 2017 Corporate Responsibility Report, and I welcome any questions or comments you might have. Please feel free to contact me via email at corporateresponsibility@davey.com. Thank you.

Sincerely.

Patrick M. Covey

President and Chief Executive Officer

Patrick J. Colon



Our Approach



Stakeholder Engagement & Materiality

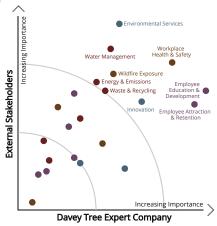
G4-18, G4-19, G4-20, G4-21, G4-23, G4-24, G4-25, G4-26, G4-27

In 2016, Davey completed a robust materiality assessment to identify, prioritize and validate the most significant environmental, social and governance (ESG) topics to our business. We began by identifying a wide range of potential ESG topics through industry research and peer benchmarking. We also looked to leading companies in corporate responsibility and environmental services to understand their ESG priorities.

A cross-functional group of Davey leaders and employees, including members of the Corporate Responsibility (CR) team, met to review and discuss this list of potential topics and mapped each to stakeholders impacted by the topics, and where these impacts occur across our value chain.

Following the identification process, we interviewed both internal and external stakeholders to determine which of the potential topics impact and matter most to Davey. We synthesized the feedback, evidence and recommendations gathered from stakeholders and prioritized our top corporate responsibility issues across our value chain. The CR team and executive leadership then validated these results.

Relative Priority of Sustainability Topics



Safe Business Practices

Workplace Health & Safety

Definition

Ensuring safe working conditions; having a robust safety training program

Primary Stakeholder Groups

Clients, Community, Capital and Insurance Providers, Regulators, Suppliers, Employees and Executives

Wildfire Exposure

Definition

Taking comprehensive measures to manage the physical and financial risks that arise, both directly and indirectly, from doing business in areas prone to wildfires

Primary Stakeholder Groups

Clients, Consumers, Capital and Insurance Providers, Regulators and Employees

Engaged Employees

Employee Attraction & Retention

Definition

Developing strategies for attracting and retaining employees to provide value to Davey

Primary Stakeholder Groups

Clients, Community, Suppliers, Employees and Executives

Employee Education & Development

Definition

Providing training opportunities and development pathways for Davey's full-time and seasonal employees

Primary Stakeholder Groups

Consumers, Community, Suppliers, Employees and Executives

Innovative Thinking

Environmental Services

Definition

Providing education and services that enable stakeholders to better manage their carbon, water, chemical, biodiversity and overall environmental footprints

Primary Stakeholder Groups

Clients, Consumers, Community, Regulators, Suppliers, Employees and Executives

Innovation

Definition

Purposefully applying information in the design, production and management of goods and services, including new and disruptive competitive service offerings

Primary Stakeholder Groups

Clients, Community, Suppliers, Employees and Executives

Sustainable Environment

Water Management

Definition

Reducing total water withdrawn through Davey's operations and managing the company's impact on quality and quantity of local water sources

Primary Stakeholder Groups

Clients, Consumers, Community, Regulators and Employees

Energy & Emissions

Definition

Reducing the energy used to power Davey's operations and improving efficiency of processes and logistics; includes vehicle use, renewable and non-renewable sources of energy and associated emissions

Primary Stakeholder Groups

Clients, Consumers, Community, Regulators and Suppliers

Waste & Recycling

Definition

Reducing the amount of waste to landfill generated by Davey through initiatives including recycling and responsible waste disposal; managing discharge of toxic and hazardous waste, including wastewater

Primary Stakeholder Groups

Clients, Consumers, Community, Regulators and Employees

Our material topics continued to drive our work in 2017. The materiality assessment process yielded new opportunities for collaborations, products and services. In 2017, we began integrating these material ESG topics into our Vision 20/20 strategic plan, the nucleus of our operational strategy and key driver of our overall direction. This integration ensures we are actively managing these topics and moving toward common goals. This report focuses on our management and progress toward these goals.



Our Approach



Sustainability Governance

G4-34, G4-56

Davey prioritizes responsible and ethical behavior in our daily operations, demonstrating leadership through our actions.

Our Corporate Policies guide expected behavior and demonstrate our commitment to high ethical standards. This includes company governance, daily operations and environmental responsibility, and can be found on our <u>website</u>.

- Our <u>Code of Ethics</u> and <u>Whistleblower Conduct Reporting</u> Policies outline our standards for business affairs and disclosure process for misconduct, ensuring business matters are conducted ethically and in compliance with all federal, state and local laws. Our <u>Code of Ethics for Financial Matters</u> ensures compliance with legal requirements, specifically the Sarbanes-Oxley Act of 2002 and related rules and regulations.
- Our Equal Employment Opportunity and Harassment Policies foster a safe and healthy work environment.
- Our Environmental Policy supports responsible environmental management throughout our operations. Learn more in the environmental sections of this report.

The Davey board of directors is ultimately responsible for oversight of our business strategy. The board has three committees—audit, compensation and governance. Read more about the Board Committee Charters here.

In 2007, we created our CR team to oversee our environmental sustainability commitments. This team meets regularly and includes leaders from operations, corporate purchasing, facilities, human resources, environmental management, financial accounting, communications and information systems. These leaders are responsible for management of our material topics. The CR team reports to the executive vice president of the Davey Institute and employee development, who in turn reports to the President and CEO. The President and CEO is a member of the board of directors.



Safe Business Practices

Safety is at the forefront of everything we do. We foster a culture of safe business practices through our actions and commitment to high standards. We reinforce our safety message every day to our employees, clients and the general public, and ensure they understand the value we place on all people. Further, we take proactive and preventive measures to mitigate safety risks before they arise and maintain our brand integrity. This section contains our management approach and annual performance for the following material environmental, social and governance (ESG) topics below.





Workplace Health & Safety

At Davey, our success lies in the safety of our employees, our clients and overall public welfare. A culture of safety and accident prevention permeate every action, ensuring our employees return home safe every night. Our best-practice standards and policies in safety and incident prevention drive value for our brand—enhancing customer relationships and attracting top talent.

Fire Prevention

Davey operates in regions across the United States and Canada, including areas with a risk of fire on and around our job sites. Mitigating these risks is essential to our employees, our clients and our business, and Davey integrates fire prevention practices throughout our daily operations.



Workplace Health & Safety

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Management Approach

G4-DMA

As one of our organizational values, safety lies at the heart of our company. From our CEO to each employee, we continue to drive our safety performance at every level of the company. Our safety strategy focuses on three core elements:







Beginning with our onboarding process for new field employees, which includes career development training, Davey employs initiatives to build and maintain a culture of safety among our teams. Our training typically consists of one-on-one, interpersonal exchanges of information which include integrating safety into every field task and providing crew members hands-on experience with performing trade skills safely.

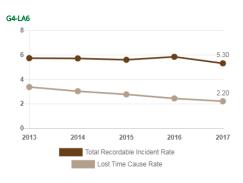
We view safety and skills training as a continuous development tool through both in-person and distance learning activities. Each year, 100 percent of our field employees receive safety education, and supervisors may assign additional safety courses to crew members, as needed.

Davey sponsors additional training through partnerships with Kent State University and the Tree Care Industry Association (TCIA), such as the Certified Treecare Safety Professional (CTSP) and Electric Hazard Awareness Program (EHAP).

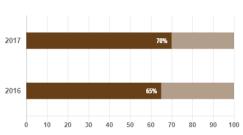


Close Call Communicator

WORKFORCE RELATED INCIDENTS



PERCENTAGE OF REGIONS WITH ZERO RECORDABLE INCIDENTS



The Davey Road to Zero safety initiative encourages employees to proactively correct unsafe conditions. Our Safety Honor Road recognizes Davey Tree employees who have been free of a recordable incident for one year or more. Results of this focus on safety are clear: the percentage of regions without a recordable incident increased five percent in 2017.

The Road to Zero journey is never over, and we work continuously to improve our safety management and performance. In 2017, we implemented our Electronic Close Call Communicator and released our Factors and Forces curriculum. We also updated our safety and training manual, to be released in early 2018, in tandem with the industry standards' updates.



Factors and Forces... and Fashion



Safe Business Practices





Fire Prevention

Davey operates in regions across the United States and Canada, including where fire seasons and changing climate increase the risk of fire on and around our job sites. Mitigating these risks is essential to our employees, our clients and our business, and Davey integrates fire prevention practices throughout our daily operations.

Management Approach

G4-DMA

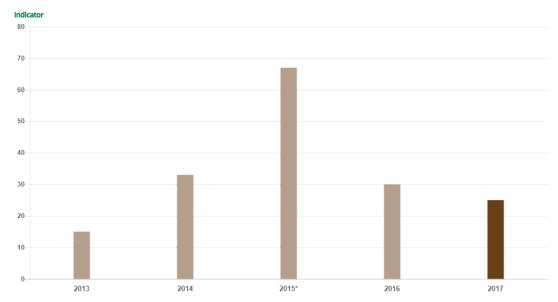
Higher than average temperatures and ongoing droughts contributed to a voracious fire season in 2017. Dry conditions continue to affect large portions of our country. In arid locations such as these, our teams work where fuel-powered equipment, utility lines and dry plant matter could create the conditions for a fire event that could endanger Davey employees, customers, communities or the natural environment. In addition, our utility crews face exposure to fire risk while clearing and maintaining trees and brush around power lines.

In areas with fire risk, field employees complete a fire prevention curriculum we developed in collaboration with multiple fire safety and forestry agencies, including CAL FIRE, California's Department of Forestry and Fire Protection. Our regional safety specialists and local management lead the training, which covers the mechanics, science and behavior of fire; environmental factors that contribute to the start and spread of fires; techniques and tools for assessing fire risk; fire safety equipment and techniques; proper refueling methods and equipment use; and regionally relevant fire history.



Davey Crew Prevents Potential Wildfire

FIRE PREVENTION TRAINING COURSES



 $^{\star} \text{In 2015}$, we introduced new training that was presented to all employees in areas with fire risk. In 2016 and 2017, we returned to our normal training schedule.

Davey employees remain constantly vigilant of fire risk. Each day, crew managers monitor weather and fire index levels. Managers will postpone a job if they believe the fire risk is too high. In addition, each employee has the ability and responsibility to suspend a job onsite if they feel it is too dangerous to continue.

Crews bring fire equipment to job sites when the fire index level is high, very high or extremely high. For safety purposes, crews will only use these tools to contain or extinguish small fires. If a crew member suspects a spark, local authorities are called to the site.

Davey documents all fire risks and reports fire events up to the president and CEO. We are pleased to report that we did not have any significant fire events in 2017.



DRG Assists with Napa Wildfire Response

Fire Events

Indicator

	2013	2014	2015	2016	2017
Number of significant fire events	0	0	0	0	0



Engaged Employees

Our people are the key to our success and sustainability as a company. We aim to engage and inspire our employees every day, providing them education and development opportunities to help them grow personally and professionally. Employee ownership has differentiated Davey in our industry and beyond, and enables us to strive to provide superior tree, landscape and environmental service to our clients. This section contains our management approach and annual performance for the following material environmental, social and governance (ESG) topics below.



Employee Attraction & Retention

As a provider of environmental services, attracting and retaining top talent is critical to our success. We actively recruit candidates who share our commitment to advance the green industry. While our industry faces challenges of seasonal employment and high average turnover, our structure as an employee-owned company enables our talented employees to invest in us as we invest in them.

Employee Education & Development

Davey employees embody the excellent service we provide to our residential, utility, commercial and government clients. We engage our employees by making it possible to grow alongside the company, providing ongoing opportunities for career advancement and personal development. Davey provides a wide array of educational and developmental programs company-wide, through distance learning, local and corporate opportunities.





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Management Approach

G4-DMA

Through employee ownership, the sustainability and success of Davey is linked directly to the success of our employees. While employee ownership serves as a differentiator for Davey, there remains a shortage of qualified candidates across skilled-labor industries. To ensure we have the right people in the right positions across our enterprise, we implemented a centralized, hub-based, talent management structure in 2016.

This year, we continued to focus talent acquisition efforts in our regional recruiting hubs, which service our residential and commercial business lines in the U.S. We also expanded the hubs to support our utility services operations and to interface with counterparts in Davey Resource Group (DRG) and Canadian operations.

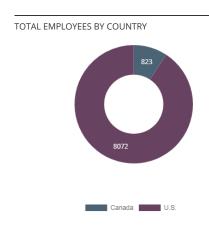
In addition to strategic recruitment, we continue to use organic methods to identify top talent through initiatives like our Send-a-Friend employee referral program. The program allows any Davey field employee to refer a potential employee. For every viable referral, the employee can receive up to \$1,000, with no limit on the number of employee referrals. We also participate in recruiting events each year and take advantage of guest lecture opportunities at universities. In the upcoming year, we plan to evaluate the efficacy of these events.



The Power of Employee Ownership

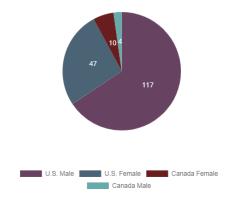
In 2017, we set a goal to establish baseline metrics to evaluate our overall recruiting performance. As we continue to mature our centralized recruiting system, we are measuring our progress across four areas: sourcing, volume, productivity and quality. We will continue measuring and monitoring our progress in these areas in 2018. As we build upon our talent acquisition processes in 2018, we will also increase our focus on employee retention.

Our People G4-9, G4-10, G4-11

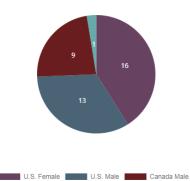




PART TIME EMPLOYEES BY REGION & GENDER

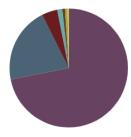


CONTRACT EMPLOYEES BY REGION & GENDER



Canada Female

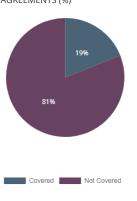
U.S. EMPLOYEES BY ETHNICITY (%)*





Native Hawaiian or Pacific Islander (0.3%)

EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS (%)



*Due to the seasonal nature of our industry, employee counts vary by as much as 5 percent over the course of the year to meet customer demand. This chart reflects our workforce at the time of our EEO 2017 Employer Information Report. All other demographic data covers anyone employed at Davey in 2017.





Employee Education & Development

Davey employees embody the excellent service we provide to our residential, utility, commercial and government clients. We engage our employees by making it possible to grow alongside the company, providing ongoing opportunities for career advancement and personal development. Davey provides a wide array of educational and developmental programs company-wide, through corporate, local and distance learning opportunities.

Management Approach

G4-DMA

To sustain our growth, it is imperative that we invest in our employees' personal and professional development. For nearly 140 years, employee education has been foundational to our success, equipping each employee with the tools he or she needs to deliver the best possible care to our clients. Through our Learning Management System (LMS), employees can access our extensive education and development programs from the touch of a button. Additionally, employees have access to classroom and in-field training and courses.

Objectives for training and education vary by service lines. In the field, instructor-led trainings may cover topics from proper equipment usage and safe climbing technique to specialized arborist trainings and specific techniques for commercial, utility or residential situations.

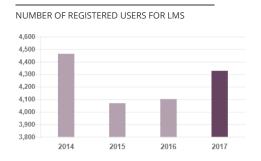


A Davey Legacy Built on Science

The Davey LMS offers employees mobile access to online courses and a virtual library, covering topics ranging from safety techniques to horticulture. In 2017, the LMS launched a new curriculum covering the <u>factors and forces</u> that trigger tree failure. Employee use of the LMS continued to increase in 2017.

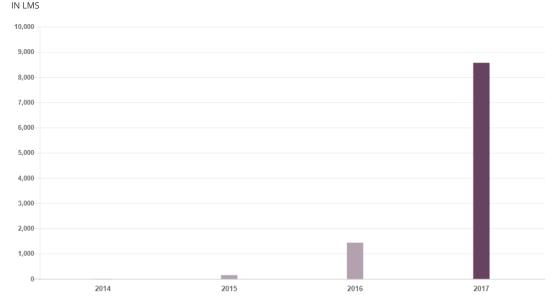
Learning Management System

Indicators





NUMBER OF EXTENSION COURSES COMPLETED



In addition to online LMS trainings, Davey offers in-person training at the Davey Institute and regional workshop sessions. The largest onsite training—the Davey Institute of Tree Sciences (D.I.T.S.)—takes place each February in Kent, Ohio. A modern-day take on the original collegiate experiences taught by John Davey, D.I.T.S. is open to employees from all over the U.S. and Canada, and the program still uses a combination of lecture and outdoor experiential learning.

Ongoing partnerships with trade associations and an associate's degree program offered through Kent State University provide Davey employees opportunities to continue their education and advance their careers at Davey.



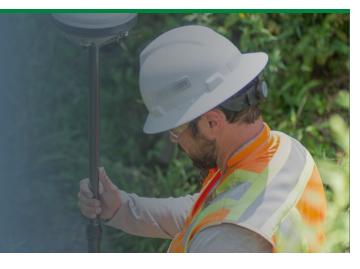
Continuing Education at Davey



Innovative **Thinking**



At Davey, we are an industry leader through research, product development and service innovation. As an environmental services company, we are uniquely situated to deliver solutions for many of society's critical challenges—climate change, social inequality and economic development. By applying the latest research and techniques to our proven solutions for a growing world, we continue to deliver outstanding service to our clients and society. This section contains our management approach and annual performance for the following material environmental, social and economic topics below.





Environmental Services

For nearly 140 years, Davey has pioneered excellence in arboriculture, horticulture and other environmental services. Today, we remain committed to environmental stewardship and education, helping our clients quantify, enhance, manage and protect their natural assets. Our solutions promote balance among people, progress and the environment, fostering positive impacts across North America and creating shared value for all.

Innovation

Davey contributes to solving some of the world's biggest environmental challenges. Innovation is vitally important as we tackle new and evolving issues each day. Our commitment to innovation is mutually beneficial for our company and our clients, turning environmental research and innovation into cost savings and revenue generation. We promote innovative thinking across our operations, encouraging employees to submit innovative ideas at any time and providing tools to turn those ideas into reality.





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Management Approach

G4-DMA

Davey's proven solutions positively impact the natural environment, creating flourishing ecosystems across North America. We understand our clients' complex landscapes, and our employees deliver superior vegetation, water and resource management as they plan, install and manage more climate-friendly landscapes. Additionally, employees educate customers on the latest plant and tree science. We advance the green industry by conducting studies and innovating solutions to our client's challenges.

Our Natural Resource Consulting Group, provides cutting-edge environmental services that bring Davey's environmental research to the marketplace. From urban forestry and geospatial planning to wetland restoration, Natural Resource Consulting's variety of services enable Davey scientists to customize solutions for each of our clients.



2017

Supporting J&J's Sustainability Efforts

In 2017, our Natural Resource Consulting Group focused on reducing chemical use across our clients' landscapes through <u>integrated vegetation</u>, natural area and water management services. For example, prescribed burns, given the right geography and climate, can reduce the need for herbicides when managing invasive species, and provide a natural vegetation management solution to markets like Indiana and Ohio. We ensure employees are properly and professionally trained on how to execute <u>this service safely and effectively.</u>

For example, we also support multi-year projects with the Michigan and Ohio Departments of Transportation to create thriving landscapes along interstate highways. These projects are not merely aesthetic; they support biodiversity, including critical pollinator habitats, and provide pollution and sound barriers between interstate traffic and nearby residential neighborhoods. The Residential and Commercial service line also provides these services to their clients.

Davey works to quantify the environmental and social benefits of our environmental services for our clients and society and will continue to report on these values annually.

HABITAT RESTORATION G4-EN13 100,000 50,000 10,000 5,000

Streams (linear feet) Wetland (acres) Upland (acres)





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Management Approach

G4-DM/

Davey's commitment to innovation is fundamental to the success of our Vision 20/20 Strategic Plan. Ongoing innovation ensures our clients receive the latest science-based horticultural and environmental services and next generation of plant health care strategies.

Building off our materiality assessment, we evaluated our innovation management processes in 2017. We found that innovation arises organically across our operations, often contributing to our corporate responsibility goals and our business offerings. Based on these findings, we implemented a more fluid process to enable the Davey Institute to support and provide counsel to foster innovation.



Embracing the Skies

For example, in tandem with our <u>bold energy reduction goal</u>, the Davey Institute worked with our equipment department to vet new <u>battery-powered equipment</u>. In response to growing client interest in water reduction and water efficiency goals, the Davey Institute also led a cross-functional team to develop potential water management services.

In addition, we are exploring new ways to connect trees and landscapes to the Internet of Things (IoT). By incorporating sensors into landscapes, clients in our pilot program could eventually monitor their landscapes in real time through mobile technology. Sensors could also alert Davey to issues that enable us to proactively address environmental conditions, plant health and safety. We will begin testing landscape IoT technologies in 2018.

Because innovation is a material topic, Davey is developing an appropriate and meaningful metric, tied to strategic direction and goals, that we can track and use to report progress annually. We do not currently have such a metric available.



Sustainable **Environment**



Throughout our history, Davey has been synonymous with environmental awareness and stewardship. We comply with all federal, state and local environmental regulations, and our policies are based on responsible, science-based actions. We hold ourselves accountable to managing and mitigating our impacts on the environment, and help our clients do the same. This section contains our management approach and annual performance for the following material environmental, social and governance (ESG) topics below.





Energy & Emissions

For nearly 140 years, we have emphasized the natural capital of trees, plant life and animal habitats created for our homes and communities. As we begin to see evidence of a changing climate in our work and research, we have the capability and responsibility to adapt to a changing climate and create positive impacts through our environmental services. Further, we remain committed to reducing our carbon emissions and fossil fuel use.

Water Management

Access to a clean and plentiful water supply continues to be a growing challenge for many of the communities in which we operate. At Davey, we are committed to continuing our legacy of environmental stewardship through responsible water use. In addition, we are increasingly collaborating with our valued stakeholders to deliver solutions for their water management needs. As an essential element for plant health care, our commitment to water stewardship is critical for the continued success of our business.





Waste & Recycling

As a provider of scientifically based horticultural and environmental services, Davey generates a significant amount of wood waste, producing more than one million tonnes of wood waste each year. Wood waste accounts for nearly 100 percent of Davey's total waste. As responsible stewards of our natural environment, we are committed to decreasing our waste footprint.



Energy & Emissions

For nearly 140 years, we have built our business on valuing the natural capital of trees, plant life and animal habitats created for our homes and communities. As we begin to see evidence of a changing climate in our work and research, we have the capability and responsibility to act on climate change and create positive impacts through our environmental services. In addition, we will continue to work internally to reduce our carbon emissions and fossil fuel use.

Management Approach

G4-DMA

Each day, our employees travel across North America, providing our clients proven solutions for a growing world. In fact, Davey operates one of the 50 largest corporate fleets in the U.S., with nearly 10,000 vehicles traveling more than 50 million miles each year.

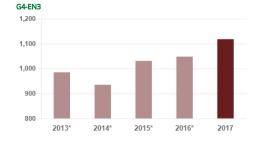
2017 Global Fleet Fuel Use

Custom Metric

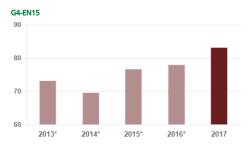
Vehicle Category	Number of Vehicles	Fuel Units (U.S. Gallons)
Cars, Light Trucks and Vans	1,666	1,719,312
Super Duty	1,743	2,373,966
Medium Duty	2,261	2,742,593
Heavy Duty	128	234,880
Chippers and Grinders	1,794	495,144
Off Road, Turf Equipment and Misc. Powered Equipment	766	305,634
Other	841	335,559
Total Global Fleet Fuel Use	9,837	8,207,088

The energy use and affiliated emissions from our fleet of vehicles and field equipment represent approximately 95 percent of our total Scope 1 and 2 emissions. Therefore, managing our fleet and equipment—ensuring each item is properly used, as well as serviced regularly and maintained—offers the most actionable opportunity to decrease our emissions and energy use.





FLEET EMISSIONS (MTCO $_2$ E IN THOUSANDS)



^{*2013-2016} data updated to reflect 2017 methodology, which uses the World Resources Institute (2015) GHG Protocol Tool for mobile combustion, Version 2.6.

In 2017, we began implementing Fleet 2020, our new fleet management system. The system, which will be launched in four phases over the next two years, provides comprehensive tracking of fleet data, including:

- Vehicle history
- Registration status
- Maintenance schedules
- Vehicle repair status
- Fuel use
- Capital expenditure requests

Available electronically, Fleet 2020 fully integrates into our existing management system and across devices. In addition, Fleet 2020 will enable automated fleet analyses, such as vehicle total cost of ownership, and help inform decisions about vehicle acquisition, operations and retirement.

In 2017, we established a bold goal to reduce our global fleet fuel consumption by 35 percent per labor hour by 2023 from a 2017 baseline. We are investigating several mechanisms to achieve this goal, including:

- Renewable and alternative fuels
- Telematics and driver behavior monitoring
- Energy efficiency and route optimization
- Partnering to innovate and acquire environmentally friendly equipment

Global Fleet Fuel Use per Labor Hour

Custom Metric

	2017
Total Global Fleet Fuel Use (U.S. Gallons)	8,207,088
Total Labor (Hours)	12,212,869
Global Fleet Fuel Use per Labor Hour (U.S. Gallons per Hour)	0.672

Internally, the equipment department is working with our business segments to develop a telematics strategy to facilitate route optimization and track vehicle information. Equipping 100 percent of Davey's fleet with GPS will enable real time monitoring location, speed, acceleration and idling. Through proactively monitoring driver behavior and promoting good driver habits, we can substantially reduce fleet fuel use.

In conjunction with the Davey Institute and Microsoft, Davey's equipment department is exploring how to reduce our fleet footprint through the Internet of Things (IoT). Through smart landscapes, field crews will be able to receive real time alerts from sensors embedded in client landscapes. Nearby crews can then respond to an alert, saving both time and fuel, and ensuring our clients' landscapes are treated in an expedient manner.



Greening Our Equipment





Water Management

Access to a clean and plentiful water supply continues to be a growing challenge for many of the communities in which we operate. At Davey, we are continuing our legacy of environmental stewardship through responsible water use. Further, we are increasingly collaborating with our valued stakeholders to deliver solutions for their water management needs. As an essential element for plant health care, our commitment to water stewardship is critical for the continued success of our business

Management Approach

G4-DMA

We began tracking our operational water use in 2014, discovering our facilities—including our two nurseries—make up only a small portion of our water footprint. Our largest water consumption happens at the job site, from the mixing of chemicals. As a provider of tree and landscape services, our chemical footprint includes fertilizers, herbicides, insecticides, fungicides and growth regulators.

Chemical Use (Liters/Kilograms)

Custom Metric

		2016	2017
Fungicides	Liquid	9,890.96	10,484.41
	Granuals	3,290.77	3,356.58
Insecticides	Liquid	21,450.82	23,595.901
	Granuals	12,949.94	13,726.93
Growth Regulator	Liquid	1,128.72	1,241.58
	Granuals	58.44	56.68
Herbicide	Liquid	55,211.96	60,733.15
	Granuals	53,994.20	55,074.08
Fertilizer	Liquid	125,551.66	121,785.11
	Granuals	663,823.57	736,844.16

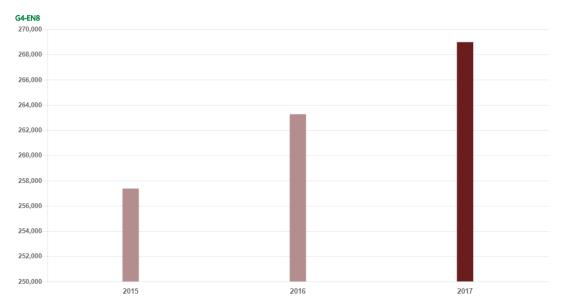
Historically, Davey has led in the responsible selection and use of these chemicals, employing robust chemical safety protocols and following EPA guidance on chemical risk reduction methods. We developed our landscape Environmental Impact Quotient (EIQ) program to evaluate the overall impacts of chemicals on the environment.

In 2017, we expanded our chemical management processes to include water use, setting an audacious goal to reduce our water consumption per labor hour by 35 percent by 2023 from a 2017 baseline. To accomplish this goal, we must rethink our entire chemical inventory and collaborate with chemical suppliers to identify and develop chemicals that require less or no water. Using our chemical inventory as a proxy, we calculate our 2017 field water use as 268,982 cubic meters, an increase of 2 percent from last year.



WSSI Teaches Water Management

WATER USE (CUBIC METERS)



Our customers also play a key role in achieving our water goal. Around the United States and Canada, our residential and commercial business units advise clients on how to reduce their water usage through proper landscape maintenance techniques and drought-tolerant landscaping. Davey Resource Group implements water-sensitive restoration plans for wetland and riparian areas, as well as urban forestry projects that improve storm water and runoff management.

In 2017, we began collaborating with external experts to <u>innovate</u> potential water management services, including water audit, irrigation and water reduction services, for our clients. We plan to continue development of these services in 2018.



Modeling Green Infrastructure





Waste & Recycling

As a provider of scientifically based horticultural and environmental services, Davey generates a significant amount of wood waste, producing more than one million tonnes of wood waste each year. Wood waste accounts for nearly 100 percent of Davey's total waste. As responsible stewards of our natural environment, we are committed to decreasing our waste footprint.

Management Approach

G4-DMA

While we strive to reuse or recycle 100 percent of our generated wood waste, not all wood waste is recyclable. Due to regulations and health concerns with disease or insect-infested wood, we can only recycle approximately 93 percent of our wood waste.

Wood waste is managed at the facility level, with each facility manager responsible for reusing, recycling or disposing of waste, while complying with all laws and regulations regarding proper disposal of hazardous waste and pollution prevention. In several markets, our operations are consolidating wood waste and partnering with local mulching companies. In other markets, wood waste is diverted on a site-to-site basis. Often, Davey facilities will donate waste to local partners in need of wood, such as youth camps, or spread wood chips onto utility line rights-of-way.



Wood Block Becomes Art for Client

Each year, we estimate wood waste based on the amount of wood produced by labor hour by service line. Estimating our wood waste helps account for our total waste footprint as we continually work to find new ways to reduce and recycle wood

Annual Wood Waste (Tonnes)

Custom Metric

	Wood Waste Generated (tonnes)	Wood Waste Recycled (%)
Landscaping	44,507	85%
Tree Surgery	437,450	85%
Utility	852,089	98%



About This Report

G4-28, G4-29, G4-30, G4-31, G4-32

This 2017 Corporate Responsibility (CR) Report, Davey's sixth overall and first online report, is written in accordance with the Global Reporting Initiative's (GRI) G4 guidelines for a Core level report.

We published our last CR Report in May 2017, covering the 2016 calendar year. This report covers Davey operations during the 2017 calendar year, in the U.S. and Canada, unless otherwise noted. Any questions, comments, concerns or suggestions regarding this or previous Davey Corporate Responsibility Reports can be directed to corporateresponsibility@davey.com.

This report highlights 2017 progress toward our <u>CR strategy</u>, which are informed by the results of a robust <u>materiality assessment</u> conducted in 2016 in accordance with the GRI G4 framework.

GRI Content Index

General Standard Disclosures

G4 Indicator	Description	Location
Strategy and Analysis		
G4-1	Statement from the most senior decision-maker of the organization about relevance of sustainability to the organization and the organization's strategy for addressing sustainability	CEO Letter
Organizational Profile		
G4-3	Name of the organization	The Davey Tree Expert Company
G4-4	Primary brands, products and services	About Our Company: Business Segments
G4-5	Location of organization's headquarters	Kent, Ohio, U.S.A.
G4-6	Number of countries where the organization operates, and names of countries with significant operations or that are specifically relevant to the sustainability topics covered in the report	United States and Canada
G4-7	Nature of ownership and legal form	Private, employee-owned
G4-8	Markets served	About Our Company: Business Segments
G4-9	Scale of the reporting organization	About Our Company: Performance
G4-10	Total workforce by employment type, employment contract and region, broken down by gender	Employee Attraction & Retention: Our People
G4-11	The total percentage of employees covered by collective bargaining agreements	Employee Attraction & Retention: Our People
G4-12	Description of the organization's supply chain	About Our Company: Supply Chain
G4-13	Significant changes during the reporting period regarding organization's size, structure, ownership or supply chain	About Our Company: Performance
G4-14	Whether and how the precautionary approach or principle is addressed by the organization	Davey Tree does not currently address the Precautionary Approach.
G4-15	Externally developed economic, environmental and social charters, principles or other initiatives to which the organization subscribes or endorses	None
G4-16	Memberships in associations and/or national/international advocacy organizations	About Our Company: Partnership & Industry. Leadership
Identified Material Aspects and Bou	indaries	
G4-17	Entities included in the organization consolidated financial and nonfinancial reports	pg. 9 of our <u>Form 10-K</u>
G4-18	Process for defining report content	Stakeholder Engagement & Materiality
G4-19	Material aspects identified in the process for defining report content	Stakeholder Engagement & Materiality
G4-22	Explanation of the effect of and reasons for any restatements of information provided in earlier reports	We have restated energy and emissions data from 2016 due to quality assurance improvements in collection and calculation.
G4-23	Significant changes from previous reporting periods in the scope and aspect boundaries	No significant changes.
Stakeholder Engagement		
G4-24	List of stakeholder groups engaged by the organization	Stakeholder Engagement & Materiality
G4-25	The basis for identification and selection of stakeholders with whom to engage	Davey frequently engages with various stakeholders, including our clients, suppliers, non-governmental and environmental organizations, regulators and employees. We identify stakeholders through input from executive leadership, the corporate responsibility team and employees. We choose stakeholders based on their knowledge and understanding of Davey's operations, services, client relationships, history and community involvement.
Report Profile		
G4-28	Reporting period	2017
G4-29	Date of most recent previous report	May 2017
G4-30	Reporting cycle	Annual
G4-31	Contact point for questions regarding the report or its contents	corporateresponsibility@davey.com
G4-32	'In accordance' option and GRI Content Index	G4 Core; we did not seek external assurance

G4 Indicator	Description	Location
Governance		
G4-34	Governance structure of organization, including committees of the highest governance body	Sustainability Governance
Ethics and Integrity		
G4-56	The organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	<u>Sustainability Governance</u>

Specific Standard Disclosures

C4 Indicators	Describition	1
G4 Indicator	Description	Location
Economic Material Topics		
Economic Performance G4-EC1	Direct economic value generated and distributed	About Our Company; Performance; additional financial data available in our Form 10-K.
G4-EC2	Risks and opportunities for the organization's activities due to climate change	Item 1A: Risks, p. 5-9 of our Form 10-K
G4-EC3	Coverage of the organization's defined benefit plan obligations	p. F-27 of our <u>Form 10-K</u>
G4-EC4	Financial assistance receuved from government	Davey Tree does not receive significant financial assistance from the government.
Innovation		
G4-DMA	Disclosure on Management Approach	Innovation
Indicator	Omitted	Omitted; data is currently unavailable; anticipated in future reporting cycles.
Social Material Topics		
Workplace Health and Safety		
G4-DMA	Disclosure on Management Approach	Workplace Health and Safety
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Workplace Health and Safety.
Fire Prevention		
G4-	Disclosure on Management Approach	Fire Prevention
Indicator	Number of significant fire events; number of fire prevention training courses	Fire Prevention
Employees		
G4-DMA	Disclosure on Management Approach for Employee Attraction and Retention	Employee Attraction and Retention
Indicator	Omitted	Omitted; data is currently unavailable; anticipated in future reporting cycles.
G4-DMA	Disclosure on Management Approach for Employee Eduation & Development	Employee Education and Development
Indicator	Number of registered users in Learning Management System	Employee Education and Development
Indicator	Number of completed objects in Learning Management System	Employee Education and Development
Environmental Material Topics		
Water Management		
G4-DMA	Disclosure on Management Approach	Water Management
G4-EN8	Total water withdrawal by source	Water Management
Indicator	Report total chemical use in liters or multiples, including chemical types used.	Water Management
Energy and Emissions		
G4-DMA	Disclosure on Management Approach	Energy and Emissions
G4-EN3	Energy consumption within the organization	Energy and Emissions
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Energy and Emissions
Effluents and Waste		
G4-DMA	Disclosure on Management Approach	Waste and Recycling
G4-EN23	Total weight of waste by type and disposal method	Waste and Recycling
Environmental Services		
G4-DMA	Disclosure on Management Approach	Environmental Services
G4-EN13	Habitats Protected or Restored	Environmental Services

Highlight Stories



ENGAGED EMPLOYEES

A Davey Legacy Built on Science

The Davey Institute of Tree Sciences (D.I.T.S.) welcomed 51 Davey employees from across North America to our annual month-long, hands-on course. Employees with varying levels of experience and education participate in this intense experience to learn decades of tree care knowledge in just four weeks. For example, identifying tree and plant problems is a difficult skill to master for many D.I.T.S. students, especially if they do not deal with tree biology in their daily work. But, learning this skill will help keep employees safe on the job, particularly when working with dead or dying trees on utility rights-of-way. The D.I.T.S. legacy of educating generations of Davey's finest tree care professionals spans more than a century, and we are proud of the 51 graduates that will carry on this legacy into the future.

"Diagnosing trees and infestations tested me the most, but this is why I wanted to come to D.I.T.S. I wanted to get a better handle on that kind of stuff and make me ultimately more effective in my role as a manager. The more wellrounded I can be, the better."

Kyle Wilson, district manager, North Muskoka, Ontario, Canada

Highlight Stories



INNOVATIVE THINKING

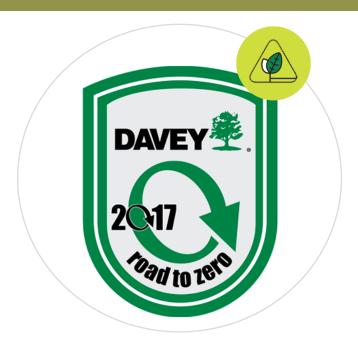
A Smarter Fleet

With nearly 10,000 vehicles spread across the continent, managing Davey's vehicle fleet is complex. In 2016, we began piloting a new tool in utility vehicles to streamline our mobile resource management—the Davey Fleet Solutions program. A suite of Telogis integrated mobile applications, the Fleet Solutions program provides employees a simple, yet comprehensive solution to fleet management. Through tablets installed in each truck cab, employees can access training videos, digital inspection and job briefing forms, electronic safety tailgate documents and other materials. In addition, drivers can fill out digital vehicle inspection reports, take photographs and submit all the information instantly to a central database. Real-time tracking of non-productive idling, start times and time on site supports efficient asset deployment. Data also supports driver safety—tracking driver habits through a mobile interface that reports on driver performance. The interface also rates drivers against their peers, encouraging improved driving through friendly competition. Top drivers in the program are also rewarded for earning high marks. So far, we have expanded the Davey Fleet Solutions program to more than 500 vehicles approximately 10 percent of our Utility fleet.

"We're able to pull utilization rates daily—that's a real benefit. When we see a truck sitting idle or at 30 percent utilization, we're able to transfer it to another client or region right away."

Laura Wimer, director of client experience, Eastern Utility

Highlight Stories



SAFE BUSINESS PRACTICES

Close Call Communicator

In 2017, we implemented our Electronic Close Call Communicator, making it easier than ever to report and debrief close call incidents and build tools and tactics for prevention. Accessible through a mobile app, the Close Call Communicator creates a company-wide platform for safety communication. Davey employees have reported more than 500 close calls using the new system, tripling the number reported last year. The Close Call Communicator also provides a further mechanism for us to analyze safety trends over time. These data enable us to proactively address potential safety risks to prevent injury or property damage. Building on the Close Call Communicator, we plan to integrate electronic incident reporting with field and motor safety observations into our risk management system. These combined efforts serve to improve the holistic management of safety across our operations. By examining data over time, Davey will see trends and use them to inform preemptive actions that will drive us forward on the Road to Zero.

"With hundreds of reported close calls, we can now look at data trends more specifically. Sharing these data across our operations will help our field employees anticipate and manage hazards."

Joe Tommasi, vice president of corporate safety



ENGAGED EMPLOYEES

Continuing Education at Davey

The Davey Institute provides employees opportunities to earn Continuing Education Units (CEUs) to maintain their International Society of Arboriculture (ISA) Certified Arborist® accreditation through online courses. The Davey Institute website for education and training allows employees to access a variety of extension lessons on subjects such as tree care and lawn care. All tree-related lessons have been approved for ISA re-certification credits, and many states have approved Davey's courses for state pesticide applicator CEU credits. Providing continuing education opportunities and resources to our employees is just one way we foster personal and professional development and create pathways for growth and career advancement at Davey.



INNOVATIVE THINKING

Davey Crews Aid Hurricane Clean-up

Traveling from as far away as Maine and California, more than 1,000 Davey employees aided Hurricane Irma recovery efforts. Because the storm hit so shortly after Hurricane Harvey, some crews went directly from storm work in Texas to storm work in Florida. Many crews convoyed to locations closer to the storm path a week prior to landfall so that they could respond immediately after the storm subsided. While waiting for the storm, crews reviewed safety procedures and prepared equipment. The crews' response to Harvey was unique because it lacked hazards common in other storms, such as downed power lines and trees laying on power lines under tension. Instead of typical tree damage due to high winds, it was primarily uprooted trees due to flooding and soil saturation. After Hurricane Irma came through, the damage in Florida included fallen trees, but much of the cleanup work consisted of broken limbs on lines and leaning trees, or damaged trees otherwise blocking the utility rightsof-way. After the storm, crews from all of Davey's service lines spent weeks identifying and removing tree hazards to help power companies restore electricity quickly.

"We cannot fully express how proud we are of these employees. We are grateful, our clients are grateful, and the public is grateful for their service. Above all, we are happy that they came home safely."

Brent Repenning, executive vice president, U.S. Utility and Davey Resource Group



SAFE BUSINESS PRACTICES

Davey Crew Prevents Potential Wildfire

Three Davey employees stopped a small wildfire from spreading in the Hat Creek area of Shasta County, California —located in high-risk Northern California. In 2017, the region recorded six wildfires that destroyed more than 40,000 acres in 2017. While volunteering for a Saturday shift, the crew spotted the brush fire on the side of the highway encircling a large pine tree. After calling Cal Fire and 911, the crew grabbed the basic firefighting tools equipped on Davey trucks —a shovel, a spade with a 4-foot handle, a 5-gallon water backpack sprayer, a fire extinguisher and a McLeod tool and set to work. Foreman Jose Vargas and climbers Tony Aitkin and Christopher McCarley cut a fire line to prevent the fire from spreading, knocked the flames down using the sprayer, and then monitored the fire until local firefighters arrived. Davey's regional safety managers conduct regular fire safety refresher courses with crews for these exact scenarios—the crew did a fantastic job!

"Davey crews aren't firemen, but they know enough that if an incident happened in the field, they have the equipment to take care of themselves and suppress a small fire."

Dave Handt, regional safety manager



SAFE BUSINESS PRACTICES

DRG Assists with Napa Wildfire Response

During the 2017 Northern California wildfires, PG&E called on 30 Davey Resource Group (DRG) employees to lead inspections of the affected areas. The base camp was set in a Napa vineyard with rows of trailers, equipment, generators and trucks filling the space. The trailers were filled with bunks, dining halls and offices for the contractors as there was no time for inspectors to go home during the fires. Inspectors were tasked with surveying the areas affected by the fires and determining which trees presented imminent hazards. At the time, fires still burned throughout Northern California. Because of the dangerous conditions, safety precautions required that everyone work in pairs, increasing time spent in the field. DRG employees worked seven days a week, inspecting each tree at least three or four times. Accurately identifying dangerous trees was critical, as many trees were in neighborhoods and around people. DRG employees' due diligence paid off, as many trees that passed the first inspection were later found hazardous. For example, some of the fires that ripped through the area were very low, so the trees would appear healthy at the top, but weeks later, another inspection would show that the fire had scorched the roots and the tree would be entirely brown. DRG employees were stationed at base camp and performed tree inspections throughout the affected areas for about five weeks. After base camp was broken down, wildfire management was ongoing, but on a smaller scale. Davey is proud to have been a part of the containment efforts and will continue to deliver unmatched excellence to our clients in Northern California.

"[The work] was emotionally heavy because this wasn't just fire burning in desolate areas, this was fire ripping through people's neighborhoods and causing massive devastation. We were dealing with people who had just lost everything."

Jonah Schwartz, project coordinator, Davey Resource Group



INNOVATIVE THINKING

Embracing the Skies

Each day, our teams at the Davey Resource Group (DRG) and Wetland Studies and Solutions, Inc. (WSSI) assist clients with planning and managing their landscapes. From wetland restoration to endangered species consulting, our scientists, foresters and planners work tirelessly to protect our clients' natural resources. In 2017, DRG and WSSI added several drones to their equipment fleets, providing Davey technicians another tool to help deliver unmatched services. Equipped with drones, Davey's certified drone pilots can offer a variety of aerial inspection services to our clients, such as:

- Providing images for inspection of utility rights-of-way clearances
- Imaging for GIS mapping
- Wetland inspection
- Tree canopy control work

Historically, technicians have often relied on lower-quality satellite imagery for many of these applications. The high-resolution cameras on our drones offer improved aerial imagery, as well as videography capabilities. The drones also enable Davey to correct image distortion, providing more detailed, spatially correct topographical sitemaps and taking our mapping services to new heights.

"Our main goal is to continue providing our clients with innovative solutions that meet their needs and exceed the quality they expect."

Deborah Sheeler, production manager, Davey Resource Group



ENGAGED EMPLOYEES

Expanding the Davey Tree Family

The Davey Tree Expert Company proudly welcomed two companies into our family of brands in 2017: Arborguard, a residential and commercial tree care company based in Atlanta, with operations in Charlotte, North Carolina, and Arborel Tree Service, a residential tree and lawn care company operating in Pittsburgh. Since 1981, Arborguard Tree Specialists have provided tree and plant health care services to residential and commercial clients in the Southeast, including some of the region's prestigious golf courses and resorts. The late Spence Rosenfeld, owner and founder of Arborguard, saw the partnership with Davey as a natural fit given Davey's reputation for integrity, innovation and leadership and its focus on safety and environmental stewardship. Since 2001, Arborel Tree Service provided specialized tree and plant health care services, lawn fertilization and pest management to clients in the greater Pittsburgh area. Arborel's founder, Robert Kruljac, and employees looked forward to joining the culture of employee ownership and appreciated the shared passion for highquality client service.

"Arborguard and Arborel are welcome additions to the Davey Family. Like Davey, they both provide excellent tree care while concentrating on client experience and quality control."

Jim Stief, executive vice president, U.S. Residential Operations



SAFE BUSINESS PRACTICES

Factors and Forces...and Fashion

Soon, you'll see more Davey employees spreading knowledge without uttering a word. Just look at their gloves. In 2017, Davey released our Factors and Forces curriculum, which enhances our employees' knowledge of the five factors that lead to strength loss in trees and five forces that trigger tree failure. Combined with our new tree climbing safety protocol, Factors and Forces enables crews to identify potential weaknesses and to avoid branch, trunk or root failures while climbing trees. Accessible via the Learning Management System, Factors and Forces consists of educational materials, videos and quizzes—teaching participants a straightforward, efficient method to determine the risk related to climbing or working in, on or near a tree. The curriculum also includes regional components for employees. Those who complete Davey's Factors and Forces training—a new safety course designed by the Davey Institute and the corporate safety department—receive a pair of custom work gloves. The gloves list on each finger one of the five factors and five forces, and serve as an educational aid to help identify, communicate and manage risk, which helps the climber and their team to stay safe.

"I like to think of the gloves as the diploma for completing Factors and Forces."

R.J. Laverne, manager of education and training



SUSTAINABLE ENVIRONMENT

Greening Our Equipment

This year, we established a bold goal to reduce our global fleet fuel consumption by 35% per labor hour by 2023 from a 2017 baseline. Since 95 percent of our greenhouse gas (GHG) emission footprint comes from our corporate fleet, achieving this goal requires innovative equipment. In 2017, the Davey Institute and equipment department partnered with Husqvarna to pilot lithium-ion battery-powered equipment, such as tree trimmers and leaf blowers. Testing the equipment with our residential and commercial business segments, we found that this equipment performs on par with, or better than, gas-powered equipment. Furthermore, this equipment is substantially quieter and physically less straining on our employees' arms and hands. Due to the pilot's success, the Davey Institute endorsed the batterypowered tools for all offices to consider when replacing older equipment. Two offices in Northeast Ohio have already switched exclusively to battery-powered equipment, and we will continue to promote battery-powered equipment throughout our operations in 2018.

"The battery-powered equipment is not only quieter, protecting our employees' hearing and providing a quieter neighborhood around job sites, it also lowers the risk of hand-arm vibration syndrome (HAVS). Compared with gaspowered chainsaws, vibrations in the battery-powered equipment are almost nonexistent."

Mike Veney, manager of environmental programs



INNOVATIVE THINKING

Innovative Solution Hydrates Trees

Overlooking the Pacific Ocean, nestled on a bluff, sits the San Elijo Campground, a place Vince Mikulanis, production manager with Davey Resource Group, remembers fondly from his childhood camping days. This past Arbor Day, teams from the Davey Resource Group (DRG), the San Diego R/C office and over 70 volunteers partnered to help revitalize the campground, which was devastated by drought and the invasive insect, myoporum thrips. Volunteers installed Catalina ironwood, Catalina cherry and Torrey pine trees drought tolerant trees that can withstand the salt-spray from the ocean and sandy soil—along with smaller shrubs. Drought tolerant trees still require hydration, which sparked volunteers to suggest a novel source of water—ice from coolers. Campers traditionally dumped leftover or unused ice on the ground or in the streets. It is not uncommon to use $20\,$ pounds of ice, which equates to about five gallons of water. Signs installed throughout the campground now encourage campers to take the ice over to the trees and dump it. In June, Mikulanis visited the site and observed people heeding the recommendation and watering the trees with their cooler ice and water. He hopes 20 years from now, his children can camp at San Elijo and enjoy the improvements the volunteers made to the site this year.



SUSTAINABLE ENVIRONMENT

Modeling Green Infrastructure

Over the past few years, i-Tree has grown into a leading suite of natural resource modeling and valuation tools. A collaboration between Davey, the U.S. Forest Service and other partners, the i-Tree suite now comprises four downloadable programs and nine web-based applications. The free software aids users in modeling canopy cover and waterflow, controlling urban pollution and temperature, and analyses of landscape planning and design. I-Tree Hydro, the first vegetation-specific urban hydrology model, enables urban planners, engineers and others to simulate the effects of changes in urban tree cover and impervious surfaces on the hydrologic cycle. Created with city-scale in mind, storm water engineers and natural resource managers can use i-Tree Hydro to assess how management practices can affect local stream responses to storms. Version 6 of i-Tree Hydro, currently in beta testing, includes several enhancements, including enhanced green infrastructure modeling, pollution analyses, and climate-based simulations.



ENGAGED EMPLOYEES

Room to Grow

In May 2017, Davey acquired 170 acres of land across the street from our corporate headquarters in Kent, Ohio. The abundance of trees and green space, diverse topography and proximity to our current corporate offices provides Davey ample opportunity for capability and facility expansion. Known as the Davey East Campus, the property could also include additional office space for our corporate functions. The property offers a variety of areas for showcasing many of Davey's diverse services, such as wetland management around the Cuyahoga River, golf course maintenance expertise or our core tree services. Davey has a long history of research and training in the Kent area, and this property will allow our integrated teams of plant, soil and insect scientists, computer specialists and horticulture and arboriculture researchers to work together in state-of-the-art indoor and outdoor laboratories.

"I think we have to be thoughtful about where we continue to grow. There's tremendous opportunities to continue to grow, but we want to make sure we do it in a strategic way."

Pat Covey, president and chief executive officer



INNOVATIVE THINKING

Supporting J&J's Sustainability Efforts

Longtime Davey client Johnson & Johnson presented details of its new sustainability goals during an Earth Day event at their Fort Washington, Pennsylvania, campus. Jason Parker, district manager of Davey's North Philadelphia R/C office, was invited to attend the event. Johnson & Johnson is working to make the campus 80 percent sustainable by 2020 and 100 percent by 2050. To meet this goal, the client installed a solar array and storm water management system on site, which has created some unique landscape maintenance challenges for Davey. Davey crews regularly apply turf growth regulator around the solar array to minimize mowing requirements and prevent damage to the arrays, which are expensive to replace if accidentally damaged. The crews must keep wildflowers—seeded as part of a storm water management system—out of the turf. Davey also prioritizes protecting the health of the 80-plus ash trees at the site against the emerald ash borer. Strict local regulations require inch-for-inch tree replacement for removed trees, which could result in a large expense should the trees require removal. For example, if a 30-inch tree was removed, enough new trees would need to be planted to equal the removed 30-inch tree. In addition to answering questions about the trees on Johnson & Johnson's campus, Parker answered employees' questions about how to protect their own trees.



ENGAGED EMPLOYEES

The Power of Employee Ownership

Davey Tree was ranked the 13th largest employee-owned company in the United States in 2017, according to a report from the National Center for Employee Ownership (NCEO). The NCEO 2017 Employee Ownership 100 list includes the nation's largest companies that are at least 50 percent owned by an employee stock ownership plan (ESOP) or other broadbased employee ownership plan. Davey has been an employee-owned company for 38 years, after employees purchased the company from the Davey family. With more than 9,000 employees, Davey continues to progress and grow under employee ownership.

"The entrepreneurial attitude that accompanies employee ownership is a driving factor in Davey's success. Fostering and encouraging that employee-ownership culture is integral to the Davey Company's continued growth and strong performance."

Pat Covey, president and chief executive officer



SUSTAINABLE ENVIRONMENT

Wood Block Becomes Art for Client

FirstEnergy, one of our valued clients, hosted a Family Safety Day at their complex in Fairlawn, Ohio, to educate employees families on the importance of safety. While the event was focused on safety, it was also chock full of good oldfashioned fun. Sharing a mutual commitment to safety, we eagerly accepted when asked to participate in the event. Additionally, Davey sponsored a woodcarving demonstration at the event, using wood waste from our operations to create a lasting piece of art. A local woodcarver, Bob Anderson, shaped the block of wood into a bear with a welcome sign, which was given away as a door prize at the event. To emphasize the event's safety focus, Anderson worked behind safety barriers while wearing the correct personal protective equipment (PPE). Two Davey employees, Lee Jordan, area manager, Utility Services and Shane Adams, general foreman, FirstEnergy account, were on hand to help answer safety questions during the demonstration. The entire process took about two hours to complete and resulted in a unique, oneof-a-kind piece for a lucky family.



SUSTAINABLE ENVIRONMENT

WSSI Teaches Water Management

In mid-2017, Wetland Studies and Solutions, Inc. (WSSI), a Davey company, hosted a delegation from China at its LEED® certified headquarters to discuss stormwater management. The group comprised of 19 government officials from the Housing and Urban-Rural Development Department of Shandong Province. Local government officials from Prince William County, Virginia, approached WSSI to share their experience and expertise in water management. The visitors toured WSSI's office, which incorporates numerous stormwater management techniques, including a green roof. Next, the group saw several nearby stormwater management project sites in the Gainesville, Virginia, area. During the tours, the Chinese delegation observed various methods of stormwater management, such as stormwater harvesting—the practice of collecting and reusing rain water runoff.