



BUILDING ON...  
2017 Sustainability Report





This report, along with our previous sustainability reports, is available in PDF format at <http://www.clarke.com>.

Comments or questions about this report can be directed to Julie E. Reiter, VP, Human Resources and Sustainable Development, at [jreiter@clarke.com](mailto:jreiter@clarke.com).

Clarke's 2017 Sustainability Report is our eighth report dedicated to sharing the initiatives and activities that are driving progress toward our 2020 sustainability goals.

This year's theme, "Building On," reflects the great pride we take in our progress, growth and continuous improvement. It also celebrates the completed construction of the "Flourishing Garden," our operations and service center in Roselle, IL.

## TABLE OF CONTENTS

An Interview with J. Lyell Clarke, President and CEO	3
2017 Highlights	4
Who We Are	5
How We Work	6
Performance Update	7
Offerings	8
People	12
Environment	16
Community	20
Acknowledgments	22
Coworkers	23

## An Interview with J. LYELL CLARKE President and CEO

**For our last report, we spoke with J. Lyell Clarke, our president and CEO, about his “Vivid Vision” of Clarke becoming a flourishing public health company by 2021. We caught up with him again this year for an update.**

### **Lyell, what progress was made in 2017 toward your Vivid Vision?**

My goal was to talk to every coworker about the Vivid Vision and the service foundation of our company. That's how we started: My grandfather worked in the U.S. Public Health Service, and my father started this company in 1946 as a mosquito control services business. In 2017, we challenged ourselves to better understand the day-in, day-out work of our customers. In response, we created an operational immersion program whereby all coworkers will spend up to a week working in our mosquito control and aquatic services operations to gain an intimate, hands-on understanding of what we (and our customers) do in mosquito control and aquatic habitat management.

### **How does a focus on service impact Clarke?**

It takes us to a higher level, blossoming in everything we do, to become a mindset and a philosophy. We recognize that we are “in service” to our customers. We're committed to satisfying customer needs by showing them how to use our products effectively and how to optimize their service protocols. In the Vivid Vision, we talk about being first responders. We embraced this role in our 2016 response to the Zika outbreak. In 2017, we had the opportunity to answer this call again, responding to the devastating Hurricanes Harvey and Irma. After a weather event, our role is to clear the way of mosquitoes to enable the relief and recovery workers to do their jobs. This identity as first responders in service to our customers and communities has really elevated the level of pride in this company.

### **We've noticed that you're referring to Clarke employees as “coworkers.” Would you share your thoughts about this shift in your language?**

I serve on an advisory board with the owner of a very successful chain of convenience stores. I am inspired by their wonderful culture and how they refer to each other (at all levels of the organization) as “coworkers.” To me, the word suggests a sense of partnership with, and service to, each other. It's an idea that fits us well. We are in service to our customers, and we are in this service together.

### **How will your new facility support this philosophy of service?**

We created our new “Flourishing Garden” service, operations and manufacturing facility in Roselle, IL, with a teaching environment in mind. It's a place where schoolchildren can learn about biodiversity through our restored woodlands and prairies, and healthy wetland and aquatic environments. We'll share how we make use of rainwater by filtering it through rain gardens. We'll talk about our solar arrays and how we're using the temperature of the earth to help heat and cool our buildings. I even envision walking trails with simulated mosquito-breeding areas to inspire the next generation of environmental scientists. My hope is to create a ripple effect, inspiring coworkers, students, members of the community and businesses to adopt more eco-effective practices.

### **You said you talked with every coworker about the Vivid Vision. What did you learn?**

What's astounding is how much coworkers talk about the Vivid Vision, and how they are taking pride in, and ownership of, each of the strategic initiatives that support it. When I asked people how doable the Vivid Vision is on a scale of zero to 10, not a single person said it isn't achievable. And when I asked, “Where do you fit in?” coworkers were easily able to articulate how they contribute to us realizing our vision. When I posed this question to the coworkers in our Natular manufacturing plant, one of our formulators shared that his work reflected every single initiative. This was one of my “proudest proud” moments in 2017.

### **The theme of this report is “Building On.” What does this mean to you?**

We're very clear that this is a journey we're on, a journey that incorporates the principles of sustainability with our aspirations to become a flourishing public health company. Each step in this journey, each point of progress, is building on something else. Our new building, designed to LEED Platinum standards, builds on the things we learned from our St. Charles Campus facility. Our product development efforts build on the principles of Green Chemistry. Our services build on our years of experience and leverage the new capabilities we've developed in response to public health and weather-related emergencies.

**We really are accomplishing amazing things, thanks to the Vivid Vision and by asking, “How Might We?” I'm really proud of this and every one of our coworkers who make it happen.**





# FLOURISHING GARDEN

CREATING A SPACE WHERE BUSINESS PROSPERS, COWORKERS THRIVE AND NATURE FLOURISHES

Thoughtfully designed workspaces provide a platform for excellence and innovation—a truth we witnessed firsthand when our service and operations team in Roselle, IL, moved into their new office building in October 2017. The space, which we refer to as the “Flourishing Garden,” is the bustling and lively command center for our Midwest service and manufacturing operations. Designed to LEED Platinum standards and with the aim of putting people first, it prioritizes open space, indoor air quality and daylight, while minimizing our environmental footprint.

Here are just some of the Flourishing Garden’s features:

- **Large central workspace** that maximizes natural light, framed with semi-private offices, a training room, collaborative meeting spaces, a wellness area, a quiet room and a mosquito identification and testing lab
  - **Living plant wall** providing 40 percent humidity, ambient sound-masking and closed-loop air filtration
  - **Roof design** that captures rainwater and filters it into a rain garden
  - **Electric vehicle charging stations** that accommodate eight vehicles
  - **Solar panels** covering every code-compliant square inch of the roof, capable of producing 130,000 kilowatt hours of electricity and compensating for 64 percent of the building’s energy use
  - **Grounds** redesigned with restored prairie, wetland and woodland spaces and on-site vegetable gardens
  - **South-facing windows** that provide year-round sunlight and radiant heat in winter and daylighting to automatically adjust lights
  - **Ventilation** that maximizes natural air circulation, including windows that open and a butterfly-design ceiling
  - **Electric systems** throughout that reduce our dependence on fossil fuels and maximize our use of solar power
- This building is the first of a multiphase development project designed to create workspaces that foster high levels of collaboration and engagement among our coworkers.



## WHY FLOURISHING GARDEN?

Located on Garden Avenue in Roselle, IL, the Flourishing Garden is a place where we work, learn, teach, grow and flourish in harmony with nature and the community.

## 2017 HIGHLIGHTS

- 3** Green Chemistry and OMRI Listed products launched or readied for 2018 release
- 2** Major emergency response efforts (Hurricanes Harvey and Irma)
- 100%** Full-time coworkers participating in discrimination and sexual harassment prevention training
- 35 million +** Steps walked by Clarke coworkers as part of our Healthy Strides program
- 50%** Reduction in year-over-year injury occurrence rate
- 13%** Total electricity from on-site renewable energy
- 11%** Reduction in carbon emissions compared to prior year
- 100%** Illinois catch-basin treatments converted from truck to bicycle
- 100%** Coworkers participating in volunteer activities

# WHO WE ARE

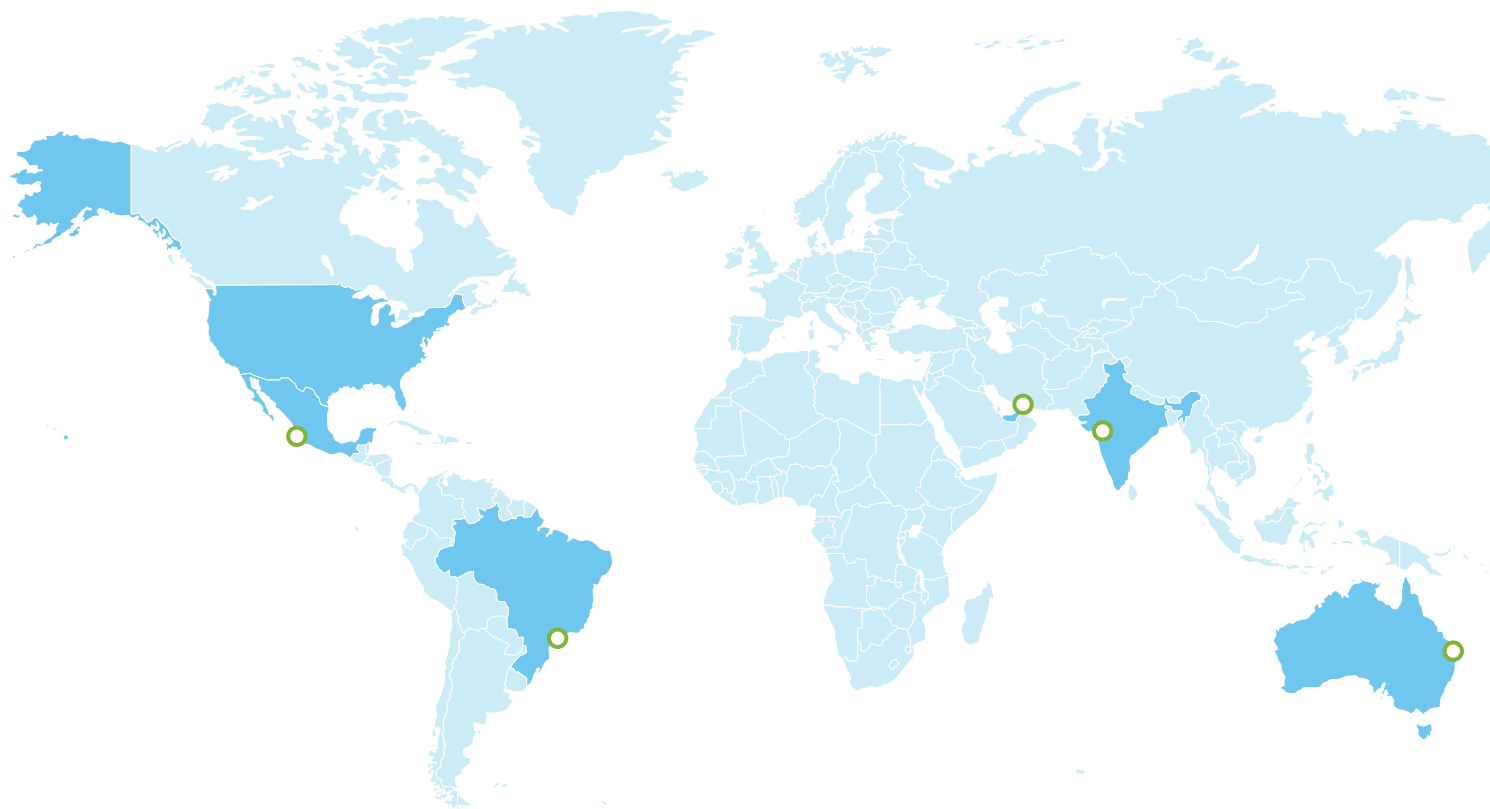
At Clarke, we make communities around the world more livable, safe and comfortable. How? By pioneering, developing and delivering the most advanced and environmentally responsible mosquito control products and aquatic services for public health. We proudly serve customers in the governmental, commercial and residential sectors and international ministries of health.

## WHERE WE WORK



### UNITED STATES

- St. Charles, IL
- Roselle, IL
- Schaumburg, IL
- Manassas, VA
- Kissimmee, FL
- Fort Meyers, FL
- LaBelle, FL
- Clearwater, MN
- Rigby, ID
- Spring Lake, MI
- Niles, MI
- Nunica, MI
- Richmond, VA
- Holmes, PA
- Atlanta, GA
- Putnam, FL
- Wellington, FL
- Leesburg, FL



### INTERNATIONAL

- Guadalajara, Mexico
- São Paulo, Brazil
- Dubai, United Arab Emirates
- Maharashtra, India
- Brisbane, Australia

### KEY

- Headquarters
- Manufacturing
- Regional Office
- Satellite Office

## HOW WE WORK

At Clarke, we are strategically investing in delivering products and services seamlessly to meet customer demand, elevate our capabilities, unleash the talent and innovation of our people, strengthen our communities, minimize our environmental footprint and live our values through our words and actions. We are guided by our Vivid Vision to become an inspiring model of what a flourishing public health organization can be.

### BUILDING ON SUSTAINABILITY

In 2017, we evolved our leadership structure, transforming our Sustainability Advisory Board into the Flourishing Leadership Council to help:

- Support and guide our efforts to be a more sustainable business
- Foster our development to become a Flourishing Enterprise
- Ensure effective stewardship of Clarke+ opportunities
- Effectively integrate Clarke+ into our existing programs and efforts

The Council meets three times a year to review and report on the progress toward our 2020 sustainability goals and the opportunities identified in the 2016 Clarke+ Appreciative Inquiry Summit. The third meeting, in November, is conducted as an All-Coworker Town Hall event.



**Appreciative Inquiry (AI) is an organizational change and strategic planning approach that brings together outside stakeholders and all Clarke coworkers to map growth initiatives that are rooted in the company's strengths. Since 2012, Clarke has used AI to envision a future that might be, while engaging the whole system and inviting participation from coworkers, customers, suppliers, community members, regulatory bodies and other stakeholders.**

### OUR VISION

Create an organization that reaches around the world to help make the lives of more than 660 million people more livable, safe and comfortable.

### OUR MISSION

Together, we help make communities around the world more livable, safe and comfortable. We are doing this by:

- Pioneering, using and championing the most eco-responsible and advanced products, services and business practices possible
- Providing support to as many communities as we can through the Clarke coworker volunteer programs and through the Clarke Cares Foundation
- Living our mission through our words and actions
- Supporting our customers, partners and each other in this endeavor, and inspiring others to join us

### OUR VALUES

Clarke's core values guide all our steps:

#### Caring for the Planet

In every aspect of our behavior and actions, we hold ourselves accountable for making responsible decisions and finding ways to lessen our impact on the Earth.

#### Caring for People

We are respectful and considerate of one another, our customers and our partners, and do all we can to positively impact and enrich the lives around us.

#### Being Passionate about What We Do

We work hard because we love what we do. We take pride in our work and the difference we make in the world.

#### Doing the Right Thing Even When It's Hard

Honesty and integrity drive our everyday actions and are reflected in our common belief to do what's best for our industry, and the people and communities we serve.

# PERFORMANCE UPDATE

In 2015, Clarke established ambitious goals to be achieved by 2020. They require us to track our progress across our four focus areas: Offerings, People, Environment and Community. Here's a snapshot of our progress to the end of 2017:

## OFFERINGS

2020 GOAL	2017 PROGRESS
Generate 30% of revenue from Next Gen products and services	17% of revenue came from Next Gen products and services
Implement label transparency program for all Next Gen products	In progress
Establish full portfolio of OMRI (Organic Materials Review Institute) Listed® products for mosquito control markets	In progress: 10 OMRI Listed® products

## PEOPLE

2020 GOAL	2017 PROGRESS
Achieve annual employee retention rate of 95% or better	91% annual employee retention rate
Reduce coworker Health and Safety (EH&S) incident rate by 80% from 2014 baseline	65% reduction from baseline year
Reduce occurrence of injuries resulting in lost time by 15% a year	50% reduction in injuries resulting in lost time compared to 2016

## ENVIRONMENT

2020 GOAL	2017 PROGRESS
<b>Carbon</b> Reduce carbon footprint by 25% compared to 2014 baseline	12% reduction
Become 100% carbon neutral for Scope 1 and Scope 2 emissions	70% carbon neutral
<b>Energy</b> Source 10% of total electricity from on-site renewable energy (solar or wind)	13% sourced from on-site renewable energy
<b>Waste</b> Reduce total waste by 25% compared to 2014 baseline	10% reduction
Reach 90% repurpose/recycle rate company-wide	77% repurpose/recycle rate
Achieve Zero Waste Certification at 4 Illinois locations	In progress
Reduce downstream waste impact by 5% compared to 2014 baseline	Work needed
<b>Water</b> Constrain water consumption at Illinois locations to no more than proportionate allocation of available watershed	Work needed

## COMMUNITY

2020 GOAL	2017 PROGRESS
Donate 1% of annual revenue from Next Gen products to environmental causes	Achieved
Donate average of 10 hours of volunteer time per full-time coworker per year	4,004 volunteer hours, valued at \$133,899, an average of 18 hours per full-time coworker
100% coworker engagement in volunteer activities	100% engagement





# OFFERINGS

Our products and services have a clear focus: to advance public health and improve quality of life for people around the world. We take our mission seriously, investing heavily in people, in service and in product development to design solutions for mosquito control and aquatic management.

## BUILDING ON OUR BASE

In 2017, we continued to build on our strong foundations in product development and service delivery. We focused on strengthening our teams and teamwork, and engaging with our customers to deliver long-term, collaborative solutions.

The following are some of the highlights of our work in 2017:

- In product development, we put considerable effort into refining and aligning our processes to work faster and smarter. We are designing better products and bringing them to customers faster by building cross-functional project teams, approaching discovery and screening in new ways and integrating more marketing drivers at the beginning of our Product Delivery Roadmap.
- In our international mosquito market, expansion efforts continued. Through education, the sharing of best practices and building deeper working relationships with governments and distributors, our international product registrations grew by 50% in 2017.
- In services, we answered the call for emergency response in the aftermath of Hurricanes Harvey and Irma, leveraging our learnings from the 2016 Zika response and building out our capabilities as emergency first responders.
- In our domestic aquatics services, we continued to create holistic solutions to improve the aquatic health of water bodies in the communities we serve.

### 2020 GOAL

Generate 30% of revenue from Next Gen products and services

Implement label transparency program for all Next Gen products

Establish full portfolio of OMRI (Organic Materials Review Institute) Listed® products for mosquito control markets

### 2017 PROGRESS

17% of revenue came from Next Gen products and services

In progress

In progress:  
10 OMRI Listed® products





# BRINGING NEW PRODUCTS TO MARKET

Clarke's Product Delivery Roadmap guides our approach to discovering, screening, designing and commercializing new products and bringing them to market. The roadmap helps ensure that 100 percent of the products we take to market are built on the principles of Green Chemistry.

In 2017, we reached significant milestones on our roadmap with:

- **Merus® 3.0**

An OMRI Listed® adulticide that also meets the USDA's National Organic Program (NOP) standards for use around organic crops. We completed the field testing and registration submissions for Merus 3, which will be available to customers in 2018.

- **Cielo™ ULV**

An adulticide space spray that introduces the first new mode of action in more than 30 years. Cielo™ ULV was field tested for World Health Organization (WHO) review, launched in Mexico and registered in Iraq.

- **Duet™ HD**

A new adulticide optimized for aerial application and readied for 2018 release. In line with the principles of Green Chemistry, this product is formulated with no petroleum distillates and has a brand-new patented carrier complex.

## PRODUCT DEVELOPMENT: ACCELERATING SPEED TO MARKET

A key focus for our product development team in 2017 was accelerating the speed of new products to market. We improved by investing in our people and processes.

### People

We initiated a cross-functional team engagement program, added laboratory and field biologists and enhanced our scientific capabilities to maximize innovation and accelerate product optimization.

### Processes

We redesigned our screening, lab modeling and field testing protocols from the ground up to accelerate the road to market.





## EXPANDING INTERNATIONALLY PUBLIC HEALTH KNOWLEDGE TRANSFER

In November, Clarke hosted public health officials from seven Middle East countries, including Syria, Kuwait, Iraq, the United Arab Emirates, Saudi Arabia, Lebanon and Egypt. In the first-ever workshop of its kind, this diverse group found common ground in something they all deal with—the risk of mosquito-borne disease. The one-day workshop focused on mosquito biology and integrated mosquito control practices.

### PROFILING OUR ANIMAL CARE PORTFOLIO

Pacific Biologics, Clarke's Australian subsidiary, achieved organic certification from the Biological Farmers Association for All-Trace, a slow-release nutritional supplement that aids in the prevention of trace element and vitamin deficiencies in cattle. All-Trace is the only organic formulation in Australia to serve the growing organic dairy and beef market.

### EARTHRIGHT EXPANSION

EarthRight® is the first and only sustainability-focused public health offering for mosquito control in the industry. Since its introduction in 2012, public-sector uptake of EarthRight has steadily grown. In 2017, we expanded our EarthRight program to two new municipalities, a major forest preserve and a number of large-scale corporate properties. This expansion into the private sector is an exciting area of growth, as more and more businesses and homeowners seek sustainability-minded and environmentally responsible products and services.

### BUILDING OUT NATURAL WETLANDS

In 2012, Clarke took over the management of 365 acres of development wasteland in the Village of Wellington, FL. The Village had a vision of converting this acreage into a natural wildlife wetland and selected Clarke as its water management partner, responsible for overseeing the littoral and shoreline plantings and maintaining the water ecosystem. The multiyear project was deemed "functionally complete" in 2017, demonstrating the value of a long-term, holistic approach to water health management.

## MOSQUITO SERVICES: ANSWERING THE CALL

In our business, we've learned to be ready to respond at a moment's notice. In the late summer of 2017, we found ourselves running two overlapping hurricane response operations in Texas and Florida while conducting preventative Zika surveillance in Brownsville, TX—and did so without disrupting our routine domestic service activities.

Late on September 4 (Labor Day), 10 days after Hurricane Harvey made landfall, we were called into action by the State of Texas to provide post-hurricane mosquito control services. Just two days later, we had teams, supplies and equipment in the field establishing baseline data for our treatment protocols.

Meanwhile, another storm was brewing in the Atlantic. Hurricane Irma made landfall in Florida on September 11. Our Florida-based operations were suspended to protect our people. As soon as the storm passed, we quickly restored operations and deployed resources to Florida's statewide response effort.

Our teams, equipment and supply caravans came from every corner of Clarke—from Illinois, Georgia, Virginia, Michigan, Louisiana and Florida. We coalesced as a high-performance team of first responders, reducing mosquito populations to enable relief efforts.



**The immediate Zika crisis had largely waned by 2017, but public vigilance had not. Throughout the year, we found ourselves in deep conversations with customers about proactive surveillance and treatment solutions for protecting public health—such as during our work in Brownsville, TX.**

## OVERCOMING ALGAE

Lake Hinsdale, a long-time customer, challenged us to design a new treatment plan to overcome chronic issues of algae overgrowth in their shallow, man-made lake. We presented a multiyear, comprehensive treatment approach as an alternative to the traditional annual service model. After just one year, the plan was proving the benefits promised.





# PEOPLE

Through our employee development initiatives, we recognize and elevate the value and contribution of each Clarke coworker. Our programs create a workplace where talent is cultivated, innovation is unleashed and health and wellness are top priorities. Our goal is to create a culture where every coworker can explore their best selves.

## INVESTING IN OUR COWORKERS

In 2017, we continued to enhance our employee development programs to foster more meaningful dialogue between managers and coworkers, and invested in training across all levels of the organization.

Highlights of our people efforts in 2017 include:

- Enhancing our leadership and talent development training to ensure that our next generation of leaders is equipped to lead Clarke to 2020 and beyond
- Introducing new performance evaluation tools and adding personal development goals to our performance goal-setting
- Refreshing our discrimination and sexual harassment prevention training program to confirm our commitments to respect and integrity in the workplace
- Implementing a revised online safety training program to elevate the importance of safety in all aspects of our work
- Building on our culture of continuous learning, continuing our successful Speakers Series, bringing in experts on sustainability, mindfulness, design thinking and climate change impacts



**My job as a leader is to help Clarke coworkers make their dreams come true.”**

- J. Lyell Clarke, President & CEO

### 2020 GOAL

Achieve annual employee retention rate of 95% or better

Reduce coworker Health and Safety (EH&S) incident rate by 80% from 2014 baseline

Reduce occurrence of injuries resulting in lost time by 15% a year

### 2017 PROGRESS

91% annual employee retention rate

65% reduction from baseline year

50% reduction in injuries resulting in lost time compared to 2016





## PREPARING OUR NEXT GENERATION OF LEADERS

We are committed to fostering leadership talent within Clarke. In 2017, our current and emerging leaders participated in a variety of leadership and talent development programs, including:

- Evolving Managers Boot Camp for frontline leaders, a three-day curriculum led by the Management Association of Illinois
- Peak Performers Leadership Coaching Program, which includes a 360-degree feedback review and a year of development coaching
- Leadership Deep Dive training through Case Western Reserve University's Weatherhead School of Management on the concepts of resonant leadership and appreciative inquiry

**“The Peak Performers Leadership Program has been an eye-opening and rewarding experience that has allowed me to truly immerse myself in the program to develop my strengths to become a stronger leader.”**

**- Adam Slater, Midwest Operations Manager**

### PRINCIPLES MATTER

Fostering a culture of authentic respect, civility and integrity has always been fundamental to the way we operate. In 2017, we conducted a refresher discrimination and sexual harassment prevention training course, which, together with our ethics hotline and employee assistance program (EAP), provides our coworkers with tools and resources to help identify and report inappropriate behavior in the workplace.



### Coworker of the Year: BILL JANY

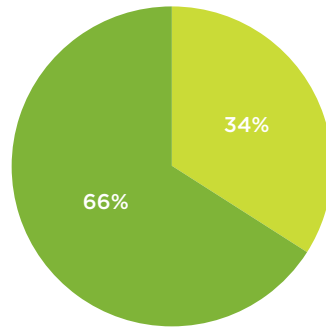
We are proud to recognize Bill Jany, senior technical advisor for our international business, as the recipient of our 2017 Coworker of the Year award. During his 21 years at Clarke, Bill has become one of the world's most respected technical experts in mosquito control. In 2017, his work shepherding Cielo™ ULV, our newest adulticide for international markets, through World Health Organization (WHO) global field evaluations was remarkable. Taking him across four continents, his work culminated in leading a public health workshop in the fall of 2017 in Dubai, United Arab Emirates. What Bill accomplished in 2017 is nothing short of impressive. Thank you for your service and contributions, Bill!

### SHARING THE LOVE OF FOOD

Our “foodiest” coworkers encourage healthy eating by sharing their favorite recipes with their coworkers on Yammer, our internal communications platform. Need inspiration for dinner tonight? Ask Meghan!

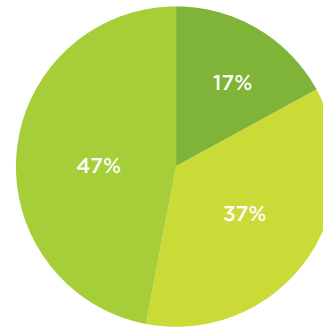


### EMPLOYEES BY GENDER



■ Male  
■ Female

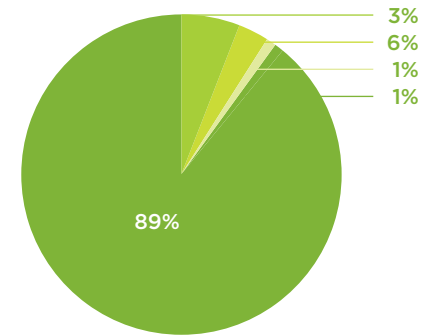
### EMPLOYEES BY AGE



■ 20-29    ■ 50+  
■ 30-49    ■ < 20

\* Numbers do not add up to 100 due to rounding

### EMPLOYEES BY ETHNICITY



■ White  
■ Black or African American  
■ Hispanic or Latino  
■ Asian  
■ Two or More Races  
■ American Indian or Alaskan Native



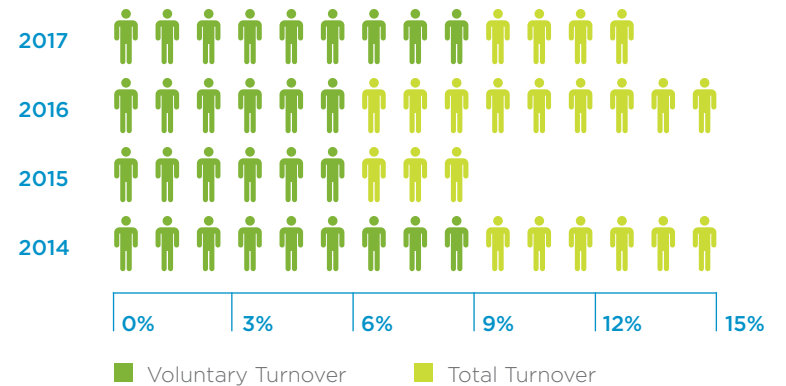
### IT'S BACK TO BASICS

Onions, tomatoes and cucumbers are grown in our gardens to help us eat better.



**About one-third of Clarke coworkers participated in walking challenges as part of our Healthy Strides program. Together, we took 35,215,500 steps, walking halfway around the world.**

### COWORKER TURNOVER (U.S. CORE WORKFORCE)



# PROMOTING COWORKER WELLNESS

We want our coworkers to bring their best selves to work each and every day, and we have implemented various programs and incentives to support their individual health and wellness goals.

## IMPROVING OUR HEALTH AND FITNESS ONE STEP AT A TIME

Through our healthy lifestyle programs, such as biometric screening, Healthy Strides and other fitness and nutrition events, we encourage everyone at Clarke to find their path to optimal health.

Our most successful initiatives in 2017 included our:

- Biometric screening program, with 91 percent participation
- Healthy-eating cooking classes with a local nutritionist and chef
- Weekly yoga class and fitness boot camp at our St. Charles Campus facility
- Healthy Strides walking challenges, which promote an active lifestyle
- Wellness Incentive Program, which rewards wellness-driven activities and behaviors

**“One of the new programs we implemented in Health & Safety last year was a nurse triage service. Bringing this program to Clarke, and seeing how valuable it has become to coworkers, supervisors and senior leaders alike, has been a very rewarding experience.”**

- Peter Ramsay, EH&S Manager

## COWORKER SAFETY INCIDENTS

		2014	2015	2016	2017
+	Total Recordable Injuries	20	9	26	8
!	Incident Rate	9.83	4.35	9.50	3.40
⌚	DART* Rate	6.88	2.90	5.85	2.94
♥	Fatalities	0	0	0	0

\*Days Away, Restricted Duty or Transfer

## SAFETY: Everybody's Business

In 2017, we built more structure into our safety programs, reinforcing our commitment to coworker safety by:

- Introducing new safety systems and procedures
- Implementing a nurse triage program, which provides our coworkers with immediate and direct access to professional medical support, guidance and follow-up
- Migrating our mandatory safety training for all Clarke coworkers to an online platform for ease of access and scheduling

Together, these initiatives helped us reduce lost time from 954 days in 2016 to 150 days in 2017.

**\* We reduced the number of recordable injuries from 26 in 2016 to 8 in 2017!**



# ENVIRONMENT

Environmental sustainability is a cornerstone of our efforts to build a flourishing enterprise. We work diligently to reduce our operational footprint and improve our performance each year, even when it's hard.

## MANAGING OUR IMPACTS

In 2017, we expanded our renewable energy program, delivered energy efficiencies in our operations, continued monitoring and managing our waste streams and established new processes for ongoing improvements across our energy and waste programs.

Highlights of our environmental efforts included:

- Celebrating the opening of our new “Flourishing Garden” facility, which boasts a solar array capable of producing 130,000 kilowatt hours of solar energy, enough to compensate for 64 percent of the energy we anticipate using there each year
- Reducing our carbon footprint by 11 percent (compared to 2016) through our facility enhancements and ongoing efficiency gains in converting our ground fleet to electric vehicles
- Generating 13 percent of our electricity needs from on-site solar, surpassing our 2020 goal
- Addressing a downward trend in our waste/recycling performance (less than 80 percent for the second consecutive year) by resetting our programs to better manage our waste streams

### 2020 GOAL

Reduce carbon footprint by 25% compared to 2014 baseline

Become 100% carbon neutral for Scope 1 and Scope 2 emissions

Source 10% of total electricity from on-site energy (solar or wind)

### 2017 PROGRESS

12% reduction

70% carbon neutral

13% sourced from on-site renewable energy



The new “Flourishing Garden” service and operations center in Roselle, IL.

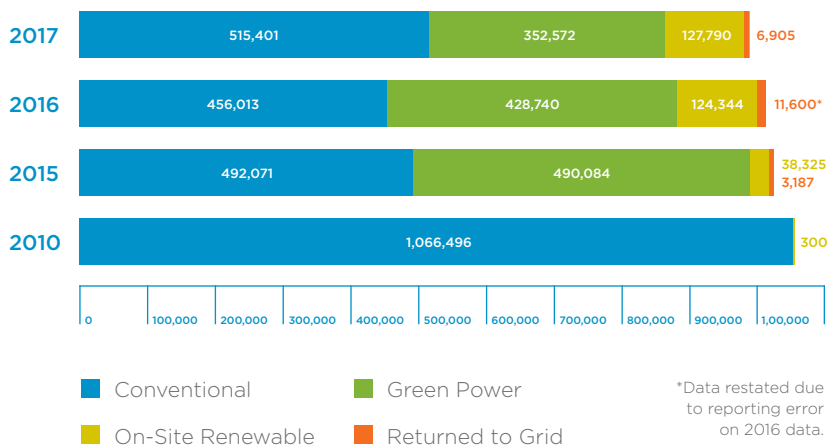


# MANAGING OUR ENERGY PORTFOLIO

We continue to implement our three-pronged strategy to manage the impact of our energy use and progress toward our 2020 goals. In 2017, Clarke:

- **Invested in renewable energy**, continuing to make gains at our Campus facility and celebrating the commissioning of our Flourishing Garden’s 130,000 kilowatt-hour solar array.
- **Increased operational energy efficiency** by continuing to convert and right-size our service fleet, improving our routing and service delivery technology platforms and completing the transition of catch-basin treatments in Illinois to 100 percent bike application.
- **Offset the emissions we could not eliminate** through renewable energy contracts (RECs) totaling 429 tonnes of CO<sub>2</sub>e and the purchase of 1,202 metric tonnes of CO<sub>2</sub>e offsets through our partnership with Carbonfund.org. Together, these measures will offset 70 percent of our total 2017 carbon emissions.

## ELECTRICITY BY SOURCE (KILOWATT HOURS)

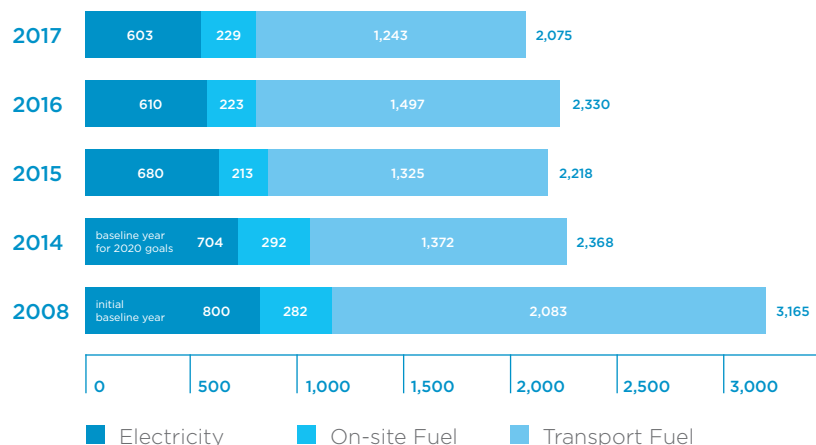


# REDUCING OUR CARBON FOOTPRINT

We continue our efforts to reduce our carbon footprint and our dependence on traditional energy sources. In 2017, we reduced our year-over-year carbon emissions from 2,330 tonnes of CO<sub>2</sub>e in 2016 to 2,075 tonnes of CO<sub>2</sub>e, equal to an 11 percent reduction. We attribute most of our achievement to improvements in our facilities and ground operations, as well as the offset coming from the completion of our 2016 Zika response program and the related reduction in service vehicles. Looking ahead, we anticipate our new solar-powered and energy-efficient “Flourishing Garden” facility will significantly contribute to a reduction in our carbon footprint.

**\* Our Campus solar array produced 121,558 kWh of electricity, with 16,998 kWh returned to the grid.**

## TOTAL CARBON FOOTPRINT (TONNES, CO<sub>2</sub>e)



# MINIMIZING OUR WASTE IMPACTS

In 2017, we continued to explore ways to reduce our waste impact. Our recycle rate, at 77 percent, was consistent with previous years, but well below our 2020 goal of 90 percent. Disappointed with this trend, we began to explore the underlying drivers of our results. One of our main discoveries was that the increase in product development and lab activities resulted in greater volumes of non-recyclable waste. In addition, our facility renovations and improvement programs disrupted our existing waste management programs. In 2018, our focus will be on refreshing our waste programs and continuing to seek solutions and partners to advance our zero-waste goals.

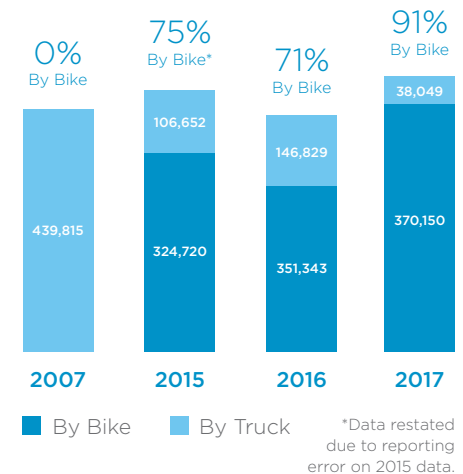
2020 GOAL	2017 PROGRESS
Reduce total waste by 25% compared to 2014 baseline	10% reduction
Reach 90% repurpose/recycle rate company-wide	77% repurpose/recycle rate
Achieve Zero Waste Certification at 4 Illinois locations	In progress
Reduce downstream waste impact by 5% compared to 2014 baseline	Work needed

**We were proud to receive the U.S. Environmental Protection Agency's WasteWise Small Business Regional Award in recognition of our achievements in 2017. It motivates us to put in the work required to achieve our 2020 goals.**



## CATCH-BASIN TREATMENTS

In 2017, we successfully converted 100% of our Illinois-based catch-basin treatments to bike application. As a result, we removed 16 trucks from our operations and prevented the consumption of at least 2,154 gallons of gas, avoided 19.1 tonnes of carbon emissions and saved nearly \$4,700. Illinois represents over 90% of our total catch-basin work.

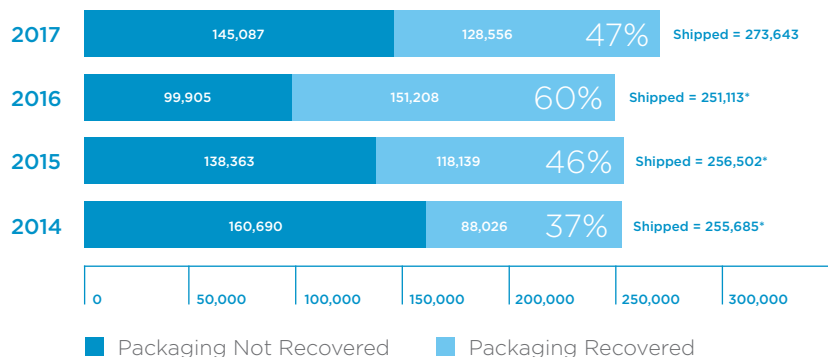




**In their first year, our Sustainable Procurement champions successfully increased our use of greener products in our Illinois labs, offices and operations. In 2017, 60% of procurement dollars were directed to green products compared to 52% in 2016, our baseline year.**



### DOWNSTREAM PACKAGING RETURN / REPURPOSE RATE (POUNDS)



\*Data restated due to reporting error on 2016 data.

### WASTE BY DISPOSAL METHOD (METRIC TONNES)

	2010	2015	2016	2017
Landfill	222.5	2.0	2.2	1.1
Waste to Energy	0	15.4	21.2	20.9
Recycle	73.8	90.2	91.8	72.9
Total Waste	296.3	107.6	115.2	94.9

## Biodiversity and BUMBLE BEES

In March 2017, the U.S. Fish & Wildlife Service listed the rusty patched bumble bee (RPBB) as “endangered.” Northeastern Illinois is an important area for conservation of the species – the same area where Clarke provides a significant amount of mosquito control for municipalities and abatement districts. Since the rusty patched bumble bee can be active earlier in the day and remain active later into the evening versus other bee species, there is potential for overlap with mosquito control applications. So the Clarke GIS and mapping team overlaid designated RPBB habitat sites with our customers’ geographic service areas to enable spray shutoff and other protective treatment protocols during adulticide applications.

# COMMUNITY

Engaging with and giving back to the communities where we live and work is the foundation of Clarke's social responsibility commitment.

In 2017, we built on our community engagement strengths to enhance and energize our Day of Caring volunteer programs and expand our Clarke Cares Foundation events. We also continued to celebrate non-profit environmental programs in the communities where we operate through our One For Tomorrow™ program.

Highlights of our efforts included:

- 100 percent coworker volunteer participation, including 4,004 volunteer hours of time
- A successful first annual Kentucky Derby fundraiser, raising \$11,000 toward the purchase of mosquito nets through our partnership with The Carter Center
- Our annual Swing for Nets golf tournament, raising funds for bed nets plus an \$18,000 donation to the Red Cross for U.S. hurricane relief
- Family Volunteer Day, where participants assembled shaving kits for Operation Support Our Troops-America. Clarke donated the contents of the kits while coworkers and their families assembled the kits for distribution overseas.

2020 GOAL	2017 PROGRESS
Donate 1% of annual revenue from Next Gen products to environmental causes	Achieved
Donate average of 10 hours of volunteer time per full-time coworker per year	4,004 volunteer hours, valued at \$133,899, an average of 18 hours per full-time coworker
100% coworker engagement in volunteer activities	100% engagement

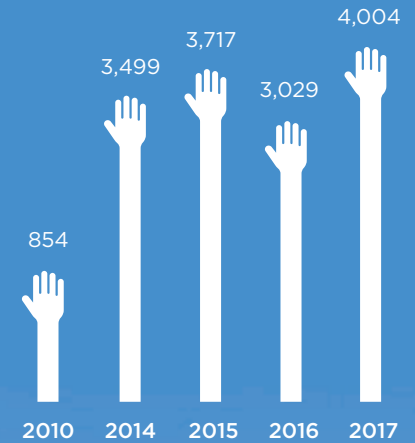
## CLARKE DAY OF CARING

Clarke's annual Day of Caring—our sixth—once again demonstrated the fundamental value we place on volunteerism. Across the country, Clarke coworkers participated in activities that ranged from pulling weeds in a cemetery and cleaning up a shoreline and a highway to volunteering at a shelter for abused monkeys. For the first time, our international team members, who were in the United States for a meeting, were able to join their Illinois-based coworkers.

## VOLUNTEER HOURS

In 2017, we achieved 100% participation in Clarke volunteer activities. Our coworkers volunteered a total of 4,004 hours—equal to \$133,909 of payroll.

Clarke coworkers also donated an additional 934 hours of their own time to support charitable causes they are passionate about.





# %ONE FOR TOMORROW™

Since 2015, Clarke has donated one percent of annual revenues from our Next Gen products and services to environmental causes in the communities where we live and work. Reflecting the “Heart of Clarke,” nominations and awards for One for Tomorrow™ are determined by Clarke coworkers.

In 2017, seven deserving organizations received One for Tomorrow grants and used the monies for a wide range of stewardship initiatives, such as marine life rescue and rehabilitation, environmental education and wildlife habitat conservation. Congratulations to our 2017 recipients:

#### **Nature Conservancy**

Virginia Reserve, VA

#### **Friends of the Forest Preserve**

District of DuPage County, IL

#### **Sea Turtle, Inc.**

South Padre Island, TX

#### **Loggerhead Marine Life Center**

Juno Beach, FL

#### **Muktangan, Paragon Charitable Trust**

Mumbai, India

#### **Reef Check**

West End, Australia

#### **San Elijo Lagoon Conservancy**

Cardiff-by-the-Sea, CA

## Giving in DuPage County

40 Clarke coworkers and family members participated in The Human Race, a 5K run/2K walk that raises funds for 55 charities in DuPage County. Clarke is proud to be partnering with Giving DuPage to help them achieve their goal of 100,000 volunteer hours from community members.



**Our relationship with Clarke can be described in three words—sincere community partner. Clarke is steadfast in its support of our volunteer initiatives by paying for employees and their families to participate in our Human Race. Everything Clarke does underscores their core values, which makes it easy to understand how the employees walk their company’s talk when it comes to making a difference.”**

**- Shefali Trivedi,  
Executive Director of Giving DuPage**



## KENTUCKY DERBY PARTY

Through our first annual Kentucky Derby Party, which we celebrated in May 2017, and our annual Swing for Nets golf tournament, we raised enough funds to donate 38,000 nets through our partnership with The Carter Center. This number of nets will protect up to 95,000 people in Nigeria from malaria and lymphatic filariasis. The total bed nets donated since the Clarke Cares Foundation was formed in 2008 is an impressive 218,600!





**Volunteering gives people a good feeling for helping out. It also shows how much more we can do to assist others who are less fortunate. The Clarke volunteer program and the annual Day of Caring are my ‘Proudest Proud’.**

- Pete Gleason,  
product formulator in Roselle, IL, also prepares tax  
returns for adults with mental disabilities

## GIVING YEAR-ROUND

Throughout 2017, coworkers at Clarke supported the following organizations:

### UNITED STATES

A Gift for Teaching, Florida

Adopt-a-Highway,  
Cook County, Illinois

Adopt-a-Highway,  
Kane County, Illinois

Adopt-a-Stream, Illinois

Anderson Animal Shelter, Illinois

Atlanta Humane Society, Georgia

Bed Mats for Homeless, Illinois

Career Days, Florida

City of Clearwater, Minnesota

Disney Nature Preserve, Florida

Evergreen Cemetery, Virginia

Feed My Starving Children, Illinois

Fermilab, Illinois

Fossil Rim Wildlife Center, Texas

Garfield Farm, Illinois

Grand River, Michigan

IL Prairie Path Clean-Up, Illinois

Loggerhead Marine Life, Florida

Morton Arboretum, Illinois

Nature Conservancy, Virginia

New Mexico Parks Department,  
New Mexico

Northern Illinois Food Bank,  
Illinois

River Corridor Foundation,  
Illinois

Salvation Army, Illinois

San Elijo Lagoon Nature Center  
and Preserve, California

Snake River, Idaho

St. James Farm at DuPage  
County Forest Preserve

The Nature Conservancy's  
Disney Wilderness Preserve,  
Florida

The Talkin' Monkeys Project,  
Florida

Village of Lombard,  
Trail Clean-up, Illinois

### INTERNATIONAL

Queensland Parks and Wildlife  
Service, Queensland, Australia

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Interface Flor • Jay Womack

• Reef Check, West  
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Conservancy, Cardiff-by-the-Sea, CA • School  
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South Padre Island, TX • Serena Sturm Architects,  
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# COWORKERS

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This report was printed on FSC® Certified 100% recycled paper manufactured from sustainable raw materials and processed chlorine free. By utilizing 100% recycled paper, we saved the following resources:

-  0.918 tons of fresh (green) wood, equivalent to 5.51 trees.
-  440 gallons of water, enough to operate a clothes washer for 3.84 months.
-  2.31 million BTUs, enough energy to power 2.76 residential refrigerators for a year.
-  19 pounds of solid waste, enough to fill .067% of a garbage truck.
-  2,380 pounds of CO2, equivalent to a car operating 2.5 months.

Note: Calculations based on an environmental impact audit report provided by Neenah Paper, Inc.