

# Improving every life

Growing our business  
by enabling action  
and impact on some  
of humanity's greatest  
challenges.



**Skin matters**  
Pg. 26



**Clean your room**  
Pg. 29



**Outside-the-box  
thinking**  
Pg. 24

# Contents



## Our leadership

Message from our CEO	4
Message from our CSO	6



## Feature stories

Feature stories	8
Facility spotlight	36



## Who we are

Introduction	46
3M Value Model	48
Our Vision	49
Our Values	49
Our Strategic Sustainability Framework	51
Global challenges	52
2025 Sustainability Goals	60
Communities	64
Employee diversity and inclusion	72
Recognition	80



## How we work

Introduction	86
Corporate governance	88
Enterprise risk	96
Corporate Code of Conduct	100
Human rights	110
Compensation	120
Employee programs	124
Health and safety	136
Environmental management	142
Raw materials	148
Water	154
Climate and energy	160
Suppliers	176



## What we create

Introduction	190
Our customers	192
Innovation management	198
Our products	210



## About report

Report scope and boundaries	220
Indices to GRI and UNGC	226
Assurance statement	244
Metric tables	250

# A message from Mike Roman



## At 3M we are a purpose-driven enterprise.

We know that we can grow our business while collaborating to solve some of humanity's greatest challenges. And we know that innovation isn't innovation without Sustainability.

3M is a longtime leader in Sustainability, going back decades to our ground-breaking Pollution Prevention Pays program, which has prevented more than two million tons of pollution. We have since built on that leadership by continuing to reduce our own footprint; since 2002, for example, we have reduced our greenhouse gas emissions by nearly 64 percent, while doubling our

revenue. We've also made progress on 3M's 2025 Sustainability Goals, and last year exceeded our targets for renewable energy and reducing manufacturing waste.

At the same time, we've invested more to create a wide range of innovative solutions that are helping our customers be more sustainable — from strengthening solar and wind power, to making businesses and homes more energy efficient. Last year alone, our products helped customers avoid nearly 15 million metric tons CO<sub>2</sub> equivalents emissions through use of select 3M product platforms.

While 3M has a strong foundation, we know that we have the ability — and the responsibility — to do even more. Going forward, we are focused on three priority areas where we can make an even greater impact on the world.

- Science for Circular: Design solutions that do more with less material, advancing a global circular economy
- Science for Climate: Innovate to decarbonize industry, accelerate global climate solutions, and improve our environmental footprint
- Science for Community: Create a more positive world through science, and inspire people to join us

In December 2018, we announced a major initiative as part of this new framework: Beginning in 2019, every new 3M product will articulate a Sustainability Value Commitment, demonstrating how it drives impact for the greater good. Because 3M launches approximately 1,000 new products each year, crossing many industries and geographies, the impact will expand greatly with each successive year.

Looking ahead, we will continue to step up our leadership toward a more sustainable future — in our own operations, and in solutions for our customers. In 2019, we plan to announce substantial new

Sustainability initiatives under our new framework in accordance with the United Nations Global Compact and its principles. And we invite you to join us.

— **Mike Roman**  
Chief Executive Officer

Science for  
Circular

Science for  
Climate

Science for  
Community

# A message from Gayle Schueller

## 2018 was a big year for Sustainability at 3M.

We have a strong history of leadership in setting goals that drive environmental stewardship and pollution prevention, and advance health and safety in communities around the world. We’ve made substantial progress against those ambitious energy, water, and climate 2025 targets — and we’re committing to do even more.



The world faces tremendous challenges in this time of unprecedented change. Science plays a critical role in building a resilient future where everyone can thrive. At 3M, science is at the heart of what we do. We collaborate with our customers, governments, and communities — with the ambition to improve every life.

In this pivotal moment, we’ve developed a new Strategic Sustainability Framework to direct our efforts to areas in which we

can partner with our stakeholders to make the biggest impact.

Building on our global capabilities and diverse technologies, we are focusing on three priority areas: **Science for Circular**, **Science for Climate**, and **Science for Community**. Using this framework, we are developing new milestone targets for air, energy, water, and waste.

3M CEO, Mike Roman, announced this new business strategy in November. One month later we announced our first new goal that embeds Sustainability into the pipeline that produces 3M’s diverse global products.



# Beginning in 2019, every 3M product entering the new product commercialization process will include a Sustainability Value Commitment that demonstrates how it drives impact for the greater good.

Creating products that use energy efficiently and make the best use of the Earth’s resources is not new at 3M. From our automotive electrification technologies that power lighter, more durable, energy-efficient connected vehicles, to our filtration technologies that protect people and filter air pollution, our products and partnerships are changing the world. Sustainability goals are now considered in the earliest stages of every new product’s development.

We recognize that no one company or community alone can solve the world’s Sustainability challenges. We’re using this framework to engage with our talented employees and global stakeholders to make connections and establish partnerships to make even greater progress.

It has been an exciting and promising year for Sustainability at 3M, and going forward we expect to share more announcements about new goals and partnerships as we continue our journey as a purpose-driven enterprise.

– **Gayle Schueller**  
Vice President and Chief  
Sustainability Officer



# Feature Stories

A legacy of leadership	10	Clean your room	28
3M takes front-row seat	12	3M inhaler connects	30
Scrub sponges	14	Rock for the ages	32
Innovative tools and tactics	16	Bringing smiles	34
Carpooling	20	Facility spotlight	
Power to the pipeline	22	Ciudad Juárez, Chihuahua, Mexico	36
Outside-the-box thinking	24	Cynthiana, Kentucky	38
		Shanghai, Xin Qiao, China	40
Skin matters	26	Cordova, Illinois	42

# A legacy of leadership

## inspires a framework for greater good



Shortly following, 3M’s executive team selected a small focus group to develop the foundation of this new strategy. With the foundation established, more than 80 company leaders and subject-matter experts convened. Using Lean Six Sigma methodology, external insights, and with bold leadership in mind, this team added depth to the framework by identifying the current state and opportunities.

“Because 3M is a science-based company with diverse operations and a large product portfolio serving nearly every industry across the globe, we’re in a unique position to make impact ourselves, and enable impact by others,” says Cassandra Garber, 3M Global Sustainability Leader. “Our new Strategic Sustainability Framework demonstrates where our critical opportunity as a company meets the critical opportunity of our world and gives us a means of prioritizing how to most effectively take action.”

Building from the strategy’s foundation, 3M launched an internal survey and commissioned Globescan, a public opinion research consultancy, to interview external stakeholders globally. The goals of this work: (1) identify the social, economic, and environmental issues 3M should focus on; (2) test the three

By any measure, 3M’s commitment to Sustainability is not new. And by no means has it been insignificant. But given the actions taken in the past year, it’s clear we now have even greater ambitions for working toward the greater good.

### 2018: the year momentum multiplied

In 2018, 3M took several steps to set an aggressive long-term strategy for the company, with the intent to use our passion, and science, to tackle challenges where we can make the biggest impact — challenges critical to a sustainable planet and the people living on it.

It began in July, when new 3M Chief Executive Officer, Michael Roman, announced that advancing Sustainability at 3M is a priority for us, our stakeholders, and our customers. It’s at the heart of who we are. He asked what it would mean to be visibly leading, and innovating, for a more sustainable future.

focus areas of the Sustainability framework; and (3) uncover the most effective ways to build engagement among stakeholders.

### Among the key findings:

- Most material issues for 3M fit well into the three focus areas of our Sustainability strategy
- Stakeholders overwhelmingly show a strong interest in engaging and collaborating with 3M on Sustainability issues
- Stakeholders encourage 3M to be bold and share a science-based point of view for each pillar

At Investor Day in November, Michael Roman announced the 3M Strategic Sustainability Framework, which focuses on three areas in which we will partner to make the greatest impact: Science for Circular, Science for Climate, and Science for Community.

### Putting our products where our purpose is

In December, at the annual United Nations Climate Conference (COP24), we shared our first major goal in conjunction with the Strategic Sustainability Framework: Beginning in 2019, every new product that enters 3M’s commercialization process must have a Sustainability Value Commitment demonstrating how it drives impact for the greater good.

Requiring a Sustainability Value

Commitment in all new products builds on 3M’s history of creating products that emphasize reuse, recycling, and reduced resource use. For example:

- Roofing materials that improve air quality and address climate concerns, like our award-winning 3M™ Smog-reducing Granules for roofing shingles
- Automotive electrification, powering the future of mobility
- Indoor freestanding devices that attract and capture airborne dust, lint, dust mite debris, mold spores, pollen, pet dander, smoke, smog, bacteria, and viruses from the air passing through the filter
- Scouring solutions that use up to 100 percent recycled materials

3M launches approximately 1,000 new products each year, with a significant fraction of its revenue generated from products released in the past five years. The multiplier impact of this Sustainability Value Commitment on our product portfolio will be immense.

### Reaffirming a commitment to renewable

The year 2018 culminated with finalizing plans for a stepped-up commitment to renewable energy, doubling our current 2025 global goal and switching our St. Paul, Minnesota, headquarters to 100 percent renewable electricity, effective March 1, 2019. The goal is now to convert our entire

operations across 70 countries to renewable electricity by 2050.

### And the journey has just begun

Science operates within a set of rules. It follows specific methods. It delivers proof and proves cause and effect. But science also breaks boundaries, challenges the status quo, and improves lives.

As a company rooted in scientific exploration and the belief that every problem has a solution, we are applying our technological expertise to help solve some of the world’s biggest challenges. The challenges we must tackle for a sustainable future don’t always follow clear rules or methods — but we see them clearly. They are broad. They are interrelated. They are solvable. We know science can help tackle them.

We are looking at ways to build purpose into leadership and talent development across the company, to recognize business opportunities that help the company grow while addressing societal issues. We cut across industries and silos to collaborate with suppliers, customers, and communities by working together toward building a more resilient world. We have a unique opportunity to apply our passion and collaboration to help the world prosper, and we’re looking forward to continuing the journey as a purpose-driven enterprise.



# 3M takes front-row seat<sup>o</sup>

## in United Nations' panel on climate change

When you do an online search of the term “climate change,” you get more than 400 million results.

And one of the most impactful organizations appearing in these results is the Intergovernmental Panel on Climate Change (IPCC).

Established in 1988 by the World Meteorological Organization and the United Nations, the IPCC provides scientific, technical, and socioeconomic assessments on the state of climate change and the risks associated with it, along with detailed policy guidelines and recommendations for the world's policymakers.

For 13 years, 3M has had a front-row seat to the IPCC proceedings. 3M EHS Laboratory Manager Brian Mader is one of 188 authors and review editors from academia, national laboratories, industry, and non-governmental organizations (NGOs) who currently evaluate and write reports on various areas associated with climate change.

**Each member country in the United Nations nominates people to represent their country on different climate subjects. Mader is part of a 32-member committee that focuses on industrial processes and product use.**

Mader was nominated in 2005 by the U.S. Environmental Protection Agency, who liked the work 3M was doing on greenhouse gases (GHG): “When we did our first GHG report, it was new territory for us. We had to develop a lot of our own methods to determine our GHG inventory, and we did that. When the EPA found out there was a desire on the part of the IPCC to write guidelines for how countries could add up their emissions, they recommended me.”

The selection worked out well. In 2007, the IPCC was awarded the Nobel Peace Prize “for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.” Mader was formally acknowledged for his contribution to that effort.

As science progresses, so do the IPCC guidelines. Currently, the group is working on its second year of refinements for the 2019 guidelines. Updates are primarily new GHG measurement methods companies and organizations can use, but also new categories. Take, for example, the smelting of rare earth metals: In 2006, no method existed to estimate GHG emissions from rare earth metal production, but now there is, so there's a new section on that.

About the process, Mader says, “You spend time talking about exact wordings — like, should a procedure be listed as good practice versus best practice? — and then you form a consensus, always based on science.

“Given the current contentious political climate, it's admirable that IPCC reaches out across countries, across industry, academia, government, and NGOs. When I go to the meetings, it's very much a mixture of these folks, all working for a common cause.

“It's satisfying, too, that 3M thinks it's important enough to support my involvement in this effort.”







# Scrub sponges<sup>o</sup> that scrub out waste

In the past, society followed a linear economy in which companies made products, and customers used and disposed of them. In recent years, people have increasingly embraced a circular economy, where the goal is to design out waste, keep products and materials in use, and integrate more renewable raw materials.

One new example of the circular economy at work — in the home — is Scotch-Brite® Heavy Duty Scrub Sponges.

These iconic yellow sponges with a green scrubbing layer are a top-selling scrub sponge brand in the U.S. They remove tough, baked-on messes, which makes them ideal for kitchen, garage, and even outdoor use.

Just as important, when customers in the U.S. use their favorite sponge now, its ability to clean won't be its only advantage.

That's because a recent 3M innovation has made it possible for us to begin making the green scrubbing fibers from 100 percent recycled content (including an average of 35 percent post-consumer recycled content).

With this change, 100 percent recycled scrubbing fibers will not only be incorporated into Scotch-Brite® Heavy Duty Scrub Sponges, but also in U.S. versions of the following 3M products:

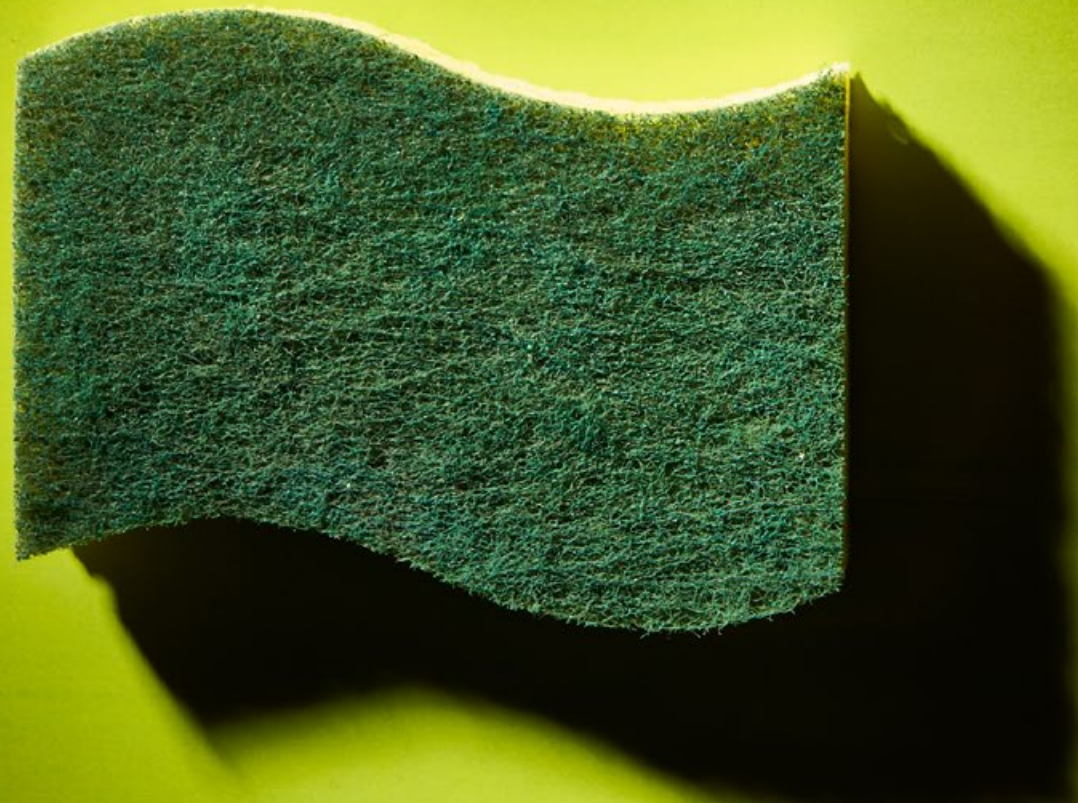
- Scotch-Brite® Non-Scratch Scrub Sponges (blue)
- Scotch-Brite® Gentle Clean Scrub Sponges (pink)
- Select Scotch-Brite® Dishwand Refills
- Scotch-Brite® Non-Scratch and Heavy Duty Scour Pads

“Enhancing our products to fit the circular economy is a focus at 3M,

the Consumer Business Group, and the Scotch-Brite™ Brand,” says Marketing Manager, Lisa Bloomer. “We’re pleased to combine this exciting material innovation that leverages recycled content with the superior scrubbing performance our customers rely on with our brand.”

**Each of these scrubbing products, by the way, will provide performance equal to sponges made without recycled content.**

Learn more on the Scotch-Brite™ Brand [here](#).





# Innovative tools and tactics

## help 3M work toward training goal

Health and safety professionals around the world need to stay up to date on the latest training. This means access to educational content to learn, share, experience, and make a difference. One of 3M's 2025 Sustainability Goals revolves around training. By building on our existing customer education programs, we are looking to help educate individuals on worker and patient safety in both health care and industrial settings.

Here are two examples of programs that are helping us reach this goal.

### 3M<sup>SM</sup> Health Care Academy

Education and training have always been part of the value provided to customers of 3M Health Care businesses. In 2014, an insight-driven design solution, [3M's Health Care Academy](#), established best practices for validating intuitiveness and usability of the eLearning experience. The solution was created as an educational platform that connects industry leaders, scientists, and inventors to improve professional expertise and patient outcomes.

Says Lisa Edstrom, Global Leader Health Care Academy, "Until 3M introduced the Health Care Academy, we lacked a unified and reliable global resource for providing education to our customers. From a technology standpoint, we didn't have a consistent way to deliver content and gather feedback from our customers."

Before creating anything, Edstrom and her team first did deep-dive research with customers and conducted a competitive analysis of training platforms. Based on what they learned, 3M launched

the Health Care Academy online platform in 2016, then added mobile capabilities in 2018 — so health care professionals could download courses from their phones, learn at their convenience, and monitor their personal progress online.

At the same time, there has been a focus on the content itself — making it as relevant and engaging as possible for health care professionals. (By the way, 75 percent of the content is accredited for continuing education.)

With the addition of 50 new offerings in 2018, the total library now consists of more than 1,200 courses. In addition, attendance at live webinars grew to 32,000 in 2018. And Health Care Academy content is now offered in 33 countries and 15 different languages. In total, 3M has educated over 350,000 professionals around the globe through in-person events, webinars, and online education.

What's more, things continue to evolve. "Practically every month we're taking steps to make our platform more robust," Edstrom says. "Especially important to me is that we're now able to track user feedback regarding

content, which will allow us to create new content that's even more relevant to people whose everyday job is improving lives."

### Oral Care Master Class Conference

In October 2018, more than 400 oral care professionals from Poland and Ukraine gathered in Lodz, Poland, for the second edition of the 3M Oral Care Master Class Conference — three days of live demonstrations, lectures, certification courses, and practical workshops for both dental and orthodontic practices.

Participants in this interdisciplinary event included dentists, orthodontists, dental assistants, dental clinic managers, and a roster of internationally known lecturers, including instructors from the highly regarded Style Italiano group.

Among other highlights at the conference were four "phantom rooms," which replicated actual clinical working conditions. In these rooms, using phantom patients, dentists participated in hands-on workshops on adhesive cementing;

ceramic, composite and porcelain veneers; and advanced teeth modeling from composite materials.

"The Master Class Conference enabled attendees to learn techniques that can elevate the quality of their work and save them time," says Grzegorz Grzegorz, 3M Regional Scientific Affairs & Education Leader. "Just as important, these techniques can help them improve the lives of their patients."

"The conference has been an excellent way for us to strengthen the bond we have with our clients, and for them to learn from each other," he says.

More information about this event can be found at [oralcaremasterclass.com](http://oralcaremasterclass.com).



# 3M Personal Safety Division Academy

In a rapidly evolving business and occupational health and safety landscape, one thing remains constant: the need for effective training and education.

To that end, [3M's Personal Safety Division](#)(PSD) Academy offers a variety of tools and software to support the safety training needs associated with personal protective equipment (PPE), including eLearning opportunities, demonstration vehicles, safety roadshows, and even virtual reality learning experiences.

One example: For more than 10 years, the PSD team in India has been sensitizing the government's Ministry of Labour & Employment (MOLE) and the Directorate General, Factory Advice Service and Labour Institutes (DGFASLI), a technical organization within the MOLE, on the need to enhance awareness among the industrial

workforce on various aspects of health and safety in general and on the right selection of PPE in particular. This effort helped to establish 3M as a subject-matter expert in the PPE category.

In 2017, the collaboration reached a new level when the first-ever public-private sector Memorandum of Understanding (MoU) was signed by 3M and the MOLE.

One concept brought to the MOLE by 3M was "Safety on Wheels," two mobile training units that would travel to over 1.3 million small and medium-size enterprises at 550 industrial clusters throughout India.

On board these 35-foot, fully equipped mobile training centers, 3M's network of experts conduct safety training and demonstrations, educates workers and safety officers, and talks about occupational safety and prevention of injuries and disease. Among the PPE products demonstrated by the Safety on Wheels teams are earplugs, eye and face protection gear, respirators, and full-body fall protection harnesses.

To support attendance, the MoU signed between 3M India and the MOLE enables the MOLE to

send companies an official order to have their employees visit the training units when they are in their area or at their factory.

**Since its launch in September 2017, the program has trained more than 92,000 industrial workers across 902 industries covering 16 out of a total 29 Indian states.**

Looking forward, the goal is to train more than 1 million users in the next four years.

Leading the Safety on Wheels team for 3M India is Vinay Pathak, Senior General Manager – Technical, who says, "This program was first of its kind for the PSD. It has already been a great brand-building initiative and promises to deliver strong long-term benefits for companies and for the people who work in industry in our country."

Learn about 3M Safety Roadshow in the United States [here](#).





# Carpooling:

## 3M global team works together on electric vehicle batteries

**In the automotive industry, the road ahead looks very different than the road in our rearview mirror.**

Changes have come faster in recent years, says Ray Eby, Vice President of 3M Automotive Electrification, and will continue to accelerate in the next few years, “driven by environmental and safety demands and the need to provide users with the experience they expect.”

Individual vehicle owners can see the benefits: greater digital connectivity, lower fuel consumption, reduced maintenance costs, and, someday, driverless vehicles.



And then there’s the reduction of tailpipe emissions of operating vehicles that run on electricity rather than gas. Electric vehicles (EVs) reduce smog-forming and other pollutants harmful to human health, along with greenhouse gases, primarily carbon dioxide (CO<sub>2</sub>). Typical passenger vehicles alone currently produce 4.6 metric tons of CO<sub>2</sub> per vehicle per year.<sup>1</sup> According to the EPA Greenhouse Gas Equivalencies Calculator, it would take 5.4 acres of U.S. forests to sequester the typical passenger vehicle’s carbon emissions each year.

Together, these industry changes are expected to transform electric-powered automobiles from a niche category to mainstream. According to International Energy Agency forecasts, the number of EVs on the road will increase from 3 million in 2017 to 125 million by 2030.<sup>2</sup>

<sup>1</sup><https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>.

<sup>2</sup><https://www.cnbc.com/2018/05/30/electric-vehicles-will-grow-from-3-million-to-125-million-by-2030-iea.html>.



### 3M: plugged in to the potential

To date, the stationary energy storage market has seen rapid growth as utilities and consumers have recognized the value in pairing batteries with windmills and solar panels.

The EV market can be more challenging than conventional combustion engine vehicles. Beyond the concern of the battery pack delivering energy, automakers need to consider the effects of harsh temperatures, mechanical vibrations, and weight. Auto electrification designers must consider the complete car ecosystem, ranging from cooling systems to power electronics, and how those functions impact the car’s powertrain design and safety.

3M is helping them meet the challenge. Using many of our technology platforms, we are producing EV battery pack components for both automakers and major automotive industry suppliers.

Our involvement in EV battery development includes bonding tapes and adhesives to hold

battery components together, thermal management materials that help take the heat away, and “light-weighting” products that enable longer driving range.

Some examples:

- 3M™ Novec™ fluid-based technology is designed to help cool and protect electronics and batteries
- 3M™ E-A-R™ cushioning products help extend battery life by guarding against normal structural vibrations and disruptions
- High-temperature adhesives and tapes to help form strong bonds in battery packs so they hold up even in the most extreme conditions
- 3M insulating and shielding materials help improve overall battery performance

### One global team

Because so many technologies are used in improving EV battery performance, 3M leaders have done away with traditional division boundaries and focused instead on serving customer needs. Says

Brandon Bartling, an advanced product development specialist in automotive electrification, “We don’t go to the customer representing a division. We go to them as 3M. We learn what the customer wants, then we bring that back and share it with our team, so we can all work together to solve the problem instead of trying to figure out who gets credit for it.”

3M automotive electrification specialists in different regions also work with their counterparts in other parts of the world, because although they share similar technology, country-specific manufacturers often take a slightly different tack on what they want in an EV battery.

Electrification is enabling great advancements in the auto industry, says Bartling, and 3M is right in the middle of it. “In terms of circling the wagons, and getting people together on it, 3M is among the leaders in putting a concerted effort around automotive electrification.”

Find out more about our EV battery solutions [here](#).

# Power to the pipeline:

## the inside path to skilled trades development



For Maureen Tholen, 3M Safety & Graphics and Industrial Business Groups Sustainability Director, the lightbulb went on three years ago. That’s when Tholen and some fellow 3M employees made the decision to travel to Louisville, Kentucky, to see what the SkillsUSA national competition was all about.

“We went there to see what more 3M could be doing, and should be doing, to support an organization the company had already been involved with for more than a decade,” she said.

Tholen and her teammates were first struck by the event’s footprint. There were more than 5,000 competitors and nearly 2,000 judges and contest organizers from across the country. There were also more than 100 categories in the competition, from architectural drafting to dental hygiene to welding fabrication, many of which make use of 3M’s products.

Their next thoughts expanded the possibilities: “We could see right away that SkillsUSA represented a tremendous business opportunity for 3M — an opportunity to help us create connections and broader awareness of the 3M brand among the next generation of skilled laborers, to help industry and schools expand education in science, technology, engineering, and mathematics (STEM) fields, and to help us create a pipeline of skilled workers for 3M and our customers.”

The 3M team also felt there was value in volunteering for a leadership role in the organization, to have a voice in shaping the future of trade careers in America.

This last observation became a reality in October 2018, when Tholen was named Chairperson of the SkillsUSA Foundation, Inc., the nonprofit, philanthropic arm of SkillsUSA. In this position, she helps guide strategic thinking as



the organization seeks to expand its outreach from 360,000 students to a million in the next few years, as well as build a stronger alumni network, inviting past SkillsUSA students to serve as mentors, judges, role models, and potential financial contributors to future training offerings.

Tholen will serve a two-year term as Chairperson of the SkillsUSA Foundation Board, which is made up of representatives from business, industry, organized labor, and others who assist in fundraising and offer expert advice and counsel to the organization.

3M is also the lead sponsor of the 2019 WorldSkills USA team, selected and trained by SkillsUSA. This sponsorship will support the efforts of the 23 competitors and their technical experts as they train to represent the United States at WorldSkills™, the largest international showcase of the skilled trades, in Kazan, Russia, in August.

What enthuses Tholen most about the potential in this organization? “The greatest pleasure comes from talking to students and listening to their stories. When you hear those stories, see what they’ve already accomplished, and realize the great opportunities they have in front of them, it’s very motivating for me.”

Asked about Maureen and 3M, SkillsUSA Executive Director Timothy Lawrence said, “Having an individual of Maureen’s caliber leading our foundation will have a lasting impact on SkillsUSA programs.”

**“When major partners like 3M step up to support us, it sends a powerful signal to corporate America that we are doing valuable work. SkillsUSA could not exist without this level of industry support.”**

### A natural match for our 3M [Science for Community](#) pillar

3M support of SkillsUSA and WorldSkills is very much in line with our pillar 3M Science for Community, says Francine Savage, 3M Health Care Sustainability Director. “These are organizations that every 3M business can support. They enable productive employment and sustainable economic growth through the investment and encouragement of skill building for current and future workers. Their community benefits from 3M Science, via our products and the expertise of our people.”



# Outside-the-box thinking<sup>o</sup>

leads to a sustainable shipping solution



Anyone who has shipped something to a friend, family member, or business contact knows the truth: Packing an item for shipping is a multi-step, multi-product process. First, you have to find the right-sized box, then add filler to prevent damage to the item you're shipping, and finally seal your package with tape. Lots of tape.

But after doing research with consumers about the rigors of shipping, 3M has come up with an easier, simpler, sustainable option.

It's called the Scotch™ Flex & Seal Shipping Roll.

The Flex & Seal packing solution eliminates unnecessary steps, supplies, and space while protecting the package contents that are so important to you and the people who receive it.



**In fact, compared with traditional shipping boxes, testing has shown that consumers could save up to 50 percent of their time, supplies, and space by using Flex & Seal shipping rolls. No boxes, no filler, and no tape are needed.**

Flex & Seal rolls are 15 inches wide by 10 feet long and made with the same material as plastic bags — so you may be able to recycle it at retail stores that have a plastic bag recycling program (ask your retailer). One side of the roll is blue; the other side is gray. When you have something you want to send, you cut a section of the roll that can wrap around the item you're sending. With blue side out, you fold the material over the item and press gray side to gray side together for a secure seal. Apply your label and you're ready to ship. The material cushions to protect a wide range of sizes and shapes. Plus, the durable outer film resists water and tearing, and can be written on.



# Skin matters:

## Raising up the largest organ in the human body



Skin is one thing we all have in common. It's the identity we share with the world. It's also a guide that can inform assessment and influence care. When we start with skin, we make a different commitment to the people we serve — one that considers health from the outside in, not just the inside out. It's time to look beyond the surface of skin. To treat it differently. It's time to think skin deeper.

“When you enter a hospital, or clinic, or other care facility,” says Heather Cmiel, 3M Communications Strategist, 3M Medical, “Skin often becomes an afterthought. Clinicians are more concerned with the condition of a patient’s heart, lungs, brain, liver, and other organs.”

This incongruity is what led 3M to launch a new awareness-building, care-enhancing program, “Thinking Skin Deeper.”

## With Thinking Skin Deeper, 3M is looking to elevate the importance of skin, and the benefits of properly managing its condition.

When the 3M Health Care business embarked on this journey in June 2018, it decided it would create three different buckets of content to help boost appreciation for skin among clinicians, facility administrators, purchasing managers, and anyone else who interacts with patients on a daily basis, and makes decisions on what kinds of skin care solutions will be used:

### 1. Education

In this program, the point of education is to define the natural life cycle of skin, explain why skin matters, and describe the steps that should be taken to ascertain its proper care in a health care setting.

### 2. Empathy

Almost everyone has had an experience that captures what happens when skin isn't carefully managed. Sharing an incident that has happened to them, or someone in their family, or someone they know is compelling motivation for clinicians to give skin due consideration.

### 3. Solutions

This content bucket explains different skin conditions and what

advancements have been made to address them. It's not a product story. This program is, after all, not about short-term sales. It's about shifting mindsets, long-term — opening doors in a different way.

Many of the tools developed to help shift mindsets can be found at [thinkskindeeper.com](https://thinkskindeeper.com). Among them: emotional, individual story videos; long-form expert panel videos on the state of skin; a 54-page state of skin report document; technical webinars; award recognition for clinicians; and deeper dives into the most common forms of skin problems, and how to prevent and/or treat them.

Communications have included online messaging on LinkedIn, periodic communications with the database of clinicians 3M has developed through the years, and an audience-involving interactive skin exhibit used at professional conferences.

In the first few months after launching the Thinking Skin Deeper program, the 3M team has come to one conclusion regarding campaign metrics: The most prolific numbers have been connected with the individual story videos, says Cmiel. “When clinicians hear

those stories, I think it triggers something with them; that skin deserves to be higher on the list of care priorities than it sometimes is.”

Matthew M. Cooper, Global Senior Medical Director, 3M Health Care Business Group, says, “When you think about it, skin is actually the largest organ in the body. It is deeply entwined in what we think about ourselves, and how we present ourselves to the world. With this program, we are training to change the mindset about the importance of caring for skin as part of a holistic view of patient care. It won't be just what you do to repair the inside, but what you do to preserve the outside that counts. Moreover, it will be one of the ways people differentiate great hospitals from average hospitals.”

There's a Sustainability perspective in this story, too. When you do the right thing from the beginning with skin, fewer materials are needed and less waste is produced, recovery time is shortened, and less time and energy are consumed treating compromised skin. It all has a spiral effect that is more than skin deep.



# Clean your room<sup>o</sup> takes on a whole new meaning

In studies conducted by the U.S. Environmental Protection Agency and its Science Advisory Board (SAB), indoor air quality has been ranked among the top five environmental concerns facing the public today.<sup>1</sup>

Fortunately, for over 25 years, 3M has been delivering cleaner air to homes and businesses with Filtrete™ Filters.

Now, there's a powerful new way to use this technology to improve indoor air quality: Filtrete™ Room Air Purifiers.

Combining an advanced air control housing with a high-performance Filtrete™ Filter, these freestanding devices attract and capture airborne dust, lint, dust mite debris, mold spores, pollen, pet dander, smoke, smog, bacteria, and viruses from the air passing through the filter.

In fact, the Filtrete™ True HEPA (high-efficiency particulate arresting)

Filter removes 99.97 percent of airborne particles<sup>2</sup> that can contribute to poor indoor air quality — including PM2.5 (atmospheric particulate matter as small as 2.5 micrometers in diameter) and particles 1,000 times smaller than those visible to the human eye.

Five Filtrete™ Room Air Purifier models have even earned the ENERGY STAR® certification by meeting strict energy-efficiency guidelines set by the EPA.

Certified models are measured based on a ratio between the model's Clean Air Delivery Rate (CADR) for dust and the electrical energy it consumes.

An ENERGY STAR® logo on the product packaging makes it easy for consumers to identify and purchase these consoles — helping save them money on energy bills without sacrificing performance, features, or comfort.

All Filtrete™ models feature either three or four fan speeds, quiet operation, and an electronic filter life indicator. They are available for rooms up to 370 square feet in size.

Learn more about Filtrete™ Room Air Purifiers [here](#).

<sup>1</sup><https://www.epa.gov/iaq-schools/why-indoor-air-quality-important-schools>.

<sup>2</sup>As small as 0.3 micrometers from the air passing through the filter media; initial efficiency value. Features vary by model.



# 3M inhaler connects<sup>o</sup>

asthma, COPD patients to better outcomes



It's a story about 3M people applying wonder and curiosity to the development of new technology that may well help improve and extend lives around the world.

More specifically, it's about a new advancement in lung disease management now in the works, thanks to 3M science.

For 60 years, 3M has partnered with pharmaceutical manufacturers in the development of inhalation devices for patients with lung diseases like asthma and chronic obstruction pulmonary disease (COPD).

Traditionally, these partnerships begin with the pharma company asking 3M for help formulating a drug into an aerosol format – and for device technology that delivers the drug with the most effective response from patients. 3M then responds with a design that matches the customer's need.

In some cases, though, we simply put wonder to work, innovating using our own initiative.

That's what 3M scientists did in 2014. They looked into the future of drug delivery to see what could possibly be done to improve the management of these diseases with a device.

"The problem is that most patients don't use their inhaler properly, so they're not getting the treatment they need," says Rebecca Blakey, 3M Global Business Leader, Connected Respiratory Health, Drug Delivery Systems.

In fact, up to 94 percent of inhaler users make technique errors when using their devices<sup>1</sup>, and 60 percent of patients don't adhere to the medication schedule prescribed by their physician.

These issues have led to less-than-desired outcomes and higher rates of hospital admissions. Big problems, when an estimated 334 million people worldwide are affected by asthma, and another 65 million people have moderate to severe COPD — which is expected to rise 24 percent by the year 2034 and become the world's third leading cause of death.<sup>1,2</sup> So in 2014, 3M Drug Delivery Systems decided to take a proactive look into the future and question how forward-thinking technology might address device misuse and adherence issues.

## Putting wonder to work

"We've done a tremendous amount of research during the development of this technology with patients, health care providers, and payers," says Dr. Steven Wick, Vice President, Product Development & Commercialization, Drug Delivery Systems. "The result is the 3M™ Intelligent Control Inhaler, a connected device that improves both patient technique and adherence."

The 3M™ Intelligent Control Inhaler is breath-actuated. A patient simply opens the cap, breathes in normally, holds his or her breath in for a few seconds, then closes the cap. Timing of breathing is not

an issue, nor is the forcefulness with which one breathes in.

This is similar to some current inhaler technology. But any similarity ends there. The 3M™ Intelligent Control Inhaler also has an "on board" display and a companion mobile app that can provide medication and refill reminders — to promote adherence — as well as real-time coaching on inhaler technique that keeps patients engaged in their therapy.

Blakey says, "The app provides tips and insights that can help patients improve their technique and better manage their respiratory health. Patients can also choose to share their data with clinicians to help evaluate device usage and monitor disease progression."

The 3M™ Intelligent Control Inhaler will be brought to market in partnership with a pharmaceutical company, and is projected to be in use within the next several years.

**Says Blakey, "When it does go to market, we believe it will engage patients and lead to better respiratory health outcomes."**

For more information on the 3M™ Intelligent Control Inhaler, [click here](#)

<sup>1</sup>Lavorini et al., 2008. Respir. Med. 102(4):593-604.  
<sup>2</sup>Restrepo et al., 2008. Int. J. Chron. Obstruct. Pulmon. Dis. 3(3):371-384.



# Rock for the ages<sup>o</sup>

According to the American Lung Association, nearly four in 10 Americans currently live in counties with unhealthy levels of ground-level ozone or particle pollution.<sup>1</sup> Unhealthy levels, unfortunately, can translate into cardiovascular, respiratory, neurological, and other physical challenges<sup>2</sup> that take their toll on people living in those areas.

At 3M, we're working on many ways to address these challenges, which also affect people in other countries around the globe.

One of the most innovative and potentially powerful tools involves sunlight and a new generation of coated roofing granules.

3M™ Smog-reducing Granules for roofing shingles were created and launched in 2018 by the 3M Industrial Mineral Products Division.

Inspired by a roofing manufacturer's curiosity about smog reduction, these tiny granules

have a specialized photocatalytic coating that 3M applies to the base mineral on a shingle's surface.

When sunlight hits the shingles, the sun's ultraviolet rays transform pollutants such as nitrogen oxide gases into nonpolluting, water-soluble ions that wash away.

In one early test, the manufacturer used a blend of 95 percent standard granules and five percent 3M™ Smog-reducing Granules in its shingles. Shingles with this blend were sent to Lawrence Berkeley National Laboratory for evaluation, where they were exposed to nitrogen oxides in a reaction chamber. Nitrogen oxide concentrations were recorded in real time prior to, during, and after UV illumination. The result? Lawrence Berkeley calculated that each ton of these granules used in shingles has the capacity to mitigate the smog created annually by one car driven 3,000 miles.

"The roofing granules are a first for residential asphalt shingles," said Frank Klink, 3M Senior Laboratory Manager. "The new 3M granules will help roofing manufacturers develop high-quality, aesthetically pleasing shingles that can turn any roof into an active, smog-reducing catalyst."

Lara Ughetta, Commercialization Leader for 3M™ Smog-reducing Granules, concurs: "We look at what the impact of this product can be, and it's pretty mind-blowing when you start adding up the aggregate effects of individual roofs being turned into smog-reducing surfaces. It could make a big difference, especially in markets where smog has been a persistent problem."

"We view smog-reducing technology, embedded into mainstream roofing materials, as a great step forward in addressing society's air quality and climate concerns," said Jonathan Parfrey,

Founder and Executive Director of Climate Resolve, a U.S. nonprofit organization focused on local solutions to global climate change.

The 3M Industrial Mineral Products Division has also developed other products that help contribute to climate improvement.

## Shrinking urban heat islands

3M™ Cool Roofing Granules are up to four times more reflective than other standard colored granules, based on 3M reflectivity test methods. They help communities bring down the urban heat island (UHI) effect in cities like Los Angeles, where nonreflective impermeable surfaces of urban roofs and pavements get warm enough in the sun to actually heat the air.

## Reflecting on the commercial roofing scene

3M™ Highly Reflective Granules are a component in asphalt cap sheets, installed on commercial, low-slope roofs. They're designed to reflect 70 percent of solar

rays for 30 years or longer in a category where many of the alternatives fail in 10 years or less.

## Converting waste into bonus business

According to Josh Orman, Strategy and Marketing Manager in Industrial Mineral Products, the division is also developing sustainable businesses around its own waste products. "We know we want to do more for Sustainability. Reducing pollution is the right thing to do. And it can offset a company's costs. Less waste is less cost and better for our environment. It's a win-win." Offering an example, Orman says 3M is now selling from its quarries formerly landfilled rock dust, or fines, to ceramic tile manufacturers for use as a component in their tile slurries. Up to 30 percent of the volume of tiles can come from these fines. And because of the chemical properties of the fines, manufacturers are able to make tiles while keeping their kilns at a lower temperature, thereby saving energy. These fines can also be used to level out construction sites and roadways.

Another waste reduction play, says Orman, is using a fine-as-flour

rock by-product from 3M quarries as a supplemental cementitious material (SCM) in the production of concrete. By promoting this environmentally-progressive alternative to traditional fly ash, this fines reclamation process has moved thousand of tons of SCM to the company's bottom line in the first 12 months of the initiative. Add this to other fines reclaimed by the 3M Little Rock, Arkansas, plant — and sold for use in construction fill, tile manufacturing, asphalt roads, and other industrial applications — and total mining by-product sales exceeded hundreds of thousand of tons in 2018.

In its pursuit of business that aligns with Sustainability, the 3M Industrial Mineral Products Business leaves no stone unturned.

<sup>1</sup>State of the Air© 2017. American Lung Association. Retrieved from [www.lung.org/assets/documents/healthy-air/state-of-the-air/state-of-the-air-2017.pdf](http://www.lung.org/assets/documents/healthy-air/state-of-the-air/state-of-the-air-2017.pdf).

<sup>2</sup>Health Effects of Ozone and Particle Pollution. (2017). American Lung Association. Retrieved from [www.lung.org/our-initiatives/healthy-air/sota/health-risks/](http://www.lung.org/our-initiatives/healthy-air/sota/health-risks/).



# Bringing smiles<sup>o</sup> to schoolchildren in China



In 2018, in partnership with FDI World Dental Federation (FDI) and the Chinese Stomatological Association, 3M Oral Care implemented an educational program to increase oral health knowledge and skills among schoolchildren, and to elevate teaching of oral disease prevention among teachers and oral health professionals.

None of this is coincidental, says Eric Wenzel, 3M Oral Care Global Business Director — Restoratives. “If you look at our vision, it’s to promote lifelong oral health. Working with different organizations and associations around the world like we did in this program helps us live that vision.”

The Smile Around the World (SAW) program involved well over 3,000 elementary schoolchildren and 90 teachers in the Chinese provinces of Ningxia, Yunnan, and Shaanxi, along with 115 volunteer oral health professionals.



Jerry Spartz, 3M Oral Care Global Business Team Leader, explains: “We chose China for two reasons. One, there is a real need there. They have a large, emerging middle class that can benefit from education. Two, our 3M China colleagues were as enthused about the program as we were.”

Initially developed by FDI, the SAW program was designed to teach good oral hygiene to young children who have limited access to oral health care, through cultural and educational programs that are engaging and entertaining.

Program activities included:

- Dentists and teachers using teeth models to demonstrate proper toothbrushing technique to children
- Children practicing toothbrushing in groups and checking each other’s results using a “Healthy Smile Happy Smile” booklet
- Children sharing the seven steps to healthy teeth with their parents, as homework
- Children drawing their image of an ideal smile

Complementing the activities was a media campaign that received exposure from 130+ newspapers, TV stations and digital media outlets in China.

Most important: after the program was completed, 99.1 percent of children said they believed it is very important to brush their teeth every day, and the number of children who said they were brushing their teeth twice daily increased by 20 percent.<sup>1</sup>

“We are thrilled with the success of SAW in China and the leading role children played in this initiative,” says Dr. Kathryn Kell FDI President. “Thanks to the support provided by 3M and working with our member organization the Chinese Stomatological Association, we were able to raise oral health awareness among 3,614 children in western China. We look forward to educating even more children in 2019 and extending the reach of World Oral Health Day, so that together we can help lead the world to optimal oral health.”

Mitsi O’Neill, Global Scientific Affairs, 3M Oral Health and Prevention, is equally enthused about the prospects for the future.

**“What I liked most is that it really demonstrates how good connections around the world can help 3M have an impact globally. Our community extends beyond the areas in which we live,” says O’Neill.**

The program will travel to other communities and support World Oral Health Day in 2019.

In other words, there’s a lot here to smile about.

<sup>1</sup>[https://www.fdiworlddental.org/sites/default/files/media/documents/fdi\\_smile\\_around\\_the\\_world-2018\\_china-project\\_report.pdf](https://www.fdiworlddental.org/sites/default/files/media/documents/fdi_smile_around_the_world-2018_china-project_report.pdf)



# Ciudad Juárez, Chihuahua, Mexico

## 3M facility spotlight



Water is a precious resource everywhere, but especially in a place like Ciudad Juárez, Mexico.

A city of more than a million people located just across the Rio Grande River from El Paso, Texas, Juárez sees meager rainfall and many days with 90 degree F heat every year. According to the WBCSD-Global Water Tool™, Juárez is in a water-stressed area as defined by the extremely high baseline water stress value.<sup>1</sup>

The use of treated water in Juárez is a key to maintaining the area’s water supply. This is where a 3M partnership is improving lives.

Edumex is a 3M-owned maquiladora company that provides production capabilities for 12 divisions of 3M. As a maquiladora, Edumex receives raw materials from the U.S.,

assembles products in Juárez, and returns finished goods to the U.S., along with any waste generated in the production process. The plant employs up to 6,000 full-time and 1,500 seasonal workers — and provides food, health care, and transportation for employees and their families.

The challenge for Edumex has been water. Due to their heavy water use and proximity to local neighborhoods, Edumex and other maquiladoras in Juárez can actually “starve” the surrounding areas of water.

But when Edumex sought ways to lower its dependence on potable water, it made an unexpected discovery: A city water treatment plant located near the Edumex facility had more treated water than it knew what to do with — because there was no way to share it, says Laura Acevedo, Environmental, Health and Safety (EHS) Manager.

“Only 7 percent of the water treatment plant’s capacity was being used,” according to Acevedo. The rest was simply being returned to drainage.

Edumex leaders and maintenance personnel explored ways to gain access to the water from the treatment plant, and after two years of discussions and negotiations with the Juárez City Water Department, they came up with a way to lay a pipeline to their facility without having to dig up local streets or spend city funds.

In 2016, this pipeline was opened, and the treated water flowed to three of five buildings in the Edumex complex for use in bathrooms and for irrigation of green areas. This is water that was formerly returned to drainage. Potable water was still used for toothbrushing, handwashing, and food preparation in the company’s cafeteria.

In 2017, nearly 80 percent of total water consumed in the three Edumex buildings was treated or recycled water. Only 20 percent was potable water from the city’s aquifer. Acevedo says the 80 percent figure will go even higher in 2018.

In 2019 and 2020, the remaining two buildings in the Edumex complex will be connected to the treated water pipeline.

**Total savings of potable water on the campus will be more than 50 million liters a year.**

“We always knew there was an issue with water in Juárez,” says Acevedo, “but I don’t think we ever realized how many benefits would be possible from doing something like this. The outcome has helped reduce our draw on the clean water system, we’ve been able to plant and irrigate more trees on our property and make it possible for as many as 10 other nearby maquiladoras to tap into this water supply.”

The city of Juárez is on the bandwagon, too. They are willing to take on some of the cost of laying pipeline, because they see a benefit in doing so for Juárez residential neighborhoods. To prevent exhausting aquifer reserves, the city is also working to change local construction codes. They are even talking about doing a media campaign to raise awareness of the adverse effects of not conserving water.

“Among the companies in this city, Edumex has positioned itself as a pioneer in the use of treated water in its processes,” says Francisco J. Núñez, Director of Regulatory Compliance and Sanitation for the Juárez City Water Department. “They have been an example to follow for other companies, which also are gradually adopting more sustainable practices.”

“I give much credit for all of these good things to the Edumex Maintenance Department,” says Acevedo. “We dream, and maintenance makes it happen.”

It should also be noted that Edumex is a good corporate citizen in other ways. The Juárez facility donates to multiple orphanages, provides scholarships to students, helps remodel classrooms at the local technical university, provides adult learning classes for employees, and helps build houses in the community.

In more ways than one, you could call this an oasis in the desert.

<sup>1</sup>The World Business Council for Sustainable Development Global Water Tool™ (WBCSD): <https://www.wbcsd.org/Programs/Food-Land-Water/Water/Resources/Global-Water-Tool>.

# Cynthiana, Kentucky

## 3M facility spotlight



There are several ways Cynthiana, Kentucky, stands out among 3M facilities in the company's worldwide operations.

For starters, it would be hard to find a facility that's more colorful. 3M Cynthiana, you see, makes the world's supply of Post-it® Notes — which includes no less than 56 different colors (at last count) of the iconic 3M product.

Cynthiana is also one of seven U.S. 3M facilities that send no manufacturing operations waste to landfills, and it's the largest of those facilities.

The effort to make the facility "zero waste to landfill" began in 2010, says Bryan Schroers, EHS Engineer. "In the beginning, our cross-functional team did a lot of dumpster diving and made a lot of trips to landfills. As we came across waste streams that could be identified, we

looked for ways to do something besides send them to landfill."

"Since 2010, the facility has been able to eliminate 360 tons of waste per year that previously went to landfills," says Michael Thrun, 3M Cynthiana EHS Manager.

According to Eric Opland, Plant Manager, "Right now, 97 percent of our facility's waste is recycled in some fashion."

That said, reaching the zero-waste-to-landfill milestone in the fourth quarter of 2016 was not the end of the journey.

In 2018, the facility held a number of kaizen (continuous improvement) events, exploring ways to improve disposal efforts, such as combining waste streams where appropriate and authorized.

The Cynthiana EHS team also participated in a 3M EHS Summit in February 2018, attended by the



company's Consumer Business Group. The goal of the summit: to share best practices and, in doing so, help other facilities with their plans to improve employee safety and deliver on the corporate Sustainability initiatives. By the conclusion of the event, attendees had developed a five-year plan for each manufacturing facility.

At 3M Cynthiana, commitment to zero waste to landfill is only one of many Sustainability initiatives. Says Thrun, "Every day, we're also looking at ways to reduce water, energy consumption, and volatile organic compound emissions."

In addition, through daily production reviews, facility leaders have identified five areas that account for 80 percent of recordable worker safety events — pinch points, powered industrial vehicles, knife injuries, housekeeping, and ergonomics. Thrun says, "We have teams assigned to each hazard, to identify where the risks are, and conduct training in those areas for all 3M Cynthiana employees."

**"This, along with oversight from leadership, has enabled us to reduce the number of recordable safety events by 30 to 40 percent in the last two years."**

— Michael Thrun, 3M Cynthiana EHS Manager

### Community support

In addition to donating each year to local nonprofits, employees participate in a wide range of volunteer service activities — from an annual clean-up of Licking River to painting Cynthiana City Hall, to volunteering time on community boards. On average, 3M Cynthiana employees donate about 2,500 hours annually to local nonprofits.

Finally, 3M Cynthiana stands out in applying for and receiving grants from the 3Mgives program. In the last three years, grants

have been directed to Cynthiana-area organizations, including security improvements for local schools, support for 4-H programs, and STEM-related (science, technology, engineering, and mathematics) educational opportunities for students.

"I've been working at 3M for 18 years," says Opland, "and giving back is one of the pillars of what we do. This will always be the case."

Learn more on 3M Cynthiana [here](#).



# Shanghai, Xin Qiao, China

## 3M facility spotlight

At 3M, the concept of continuous improvement doesn't begin and end with products.

Proof positive of this can be found in the company's facility in Xin Qiao, a suburb of Shanghai, China's largest city.

Opened in 1998 and currently home for around 800 3M employees, Shanghai Xin Qiao has made significant strides in recent years to reduce waste, volatile organic compounds (VOCs), water consumption, and electrical usage.

**The plant uses five different manufacturing platforms — coating, converting, compounding, extrusion, and non-woven fabrication — to produce a wide range of products, including paper tape, foil tape, conductive tape, structural and spray adhesives, reflective sheeting, and fire protection products.**



The facility makes products for four of the five 3M business groups: Industrial, Electronics and Energy, Consumer, and Safety and Graphics.

### Waste

Brian Peng, Shanghai Xin Qiao Environmental, Health, and Safety (EHS) Manager, says, “In terms of waste reduction, we have optimized our coating and mixing processes to allow us to reuse solvent for cleaning and reduce the quantity of hazardous waste we generate. We also categorized the waste we had been incinerating and found that we could recycle some of it instead of incinerating it. These efforts also have the added benefit of reducing our overall VOC emissions.”

### Water

At Shanghai Xin Qiao, water conservation and reuse opportunities are continually evaluated. The facility is reducing its use of city water (potable drinking water) and replacing with non-potable water. At the same time, by developing onsite storage for this non-potable source, the facility has been able to further reduce its dependence on the city's drinking water supply.

### Energy

To address new emission control requirements established by the Shanghai Environmental Protection Bureau (EPB), 3M Shanghai Xin Qiao is optimizing operation and maintenance of its pollution control equipment, regenerative thermal oxidizers (RTOs), and thermal oxidizers (TOs). This increase in pollution control equipment also means an increase in consumption of electricity and natural gas, so actions have been taken to offset this increase. A new solar system generates about five percent of the facility's electrical power requirements, including lighting, electric car charging, some process equipment, and hot water for employee use. A redesigned local exhaust ventilation and coating line oven process reduces emissions air flow and energy use. Behind the scene, an online energy monitoring system tracks energy use by production line every minute, every day, every month.

### VOC

In the past two years, continuous improvement has also produced reductions in VOC emissions. Adhesive ingredients have been redesigned, reducing solvent

use. Improvements in the emissions capture method has reduced VOC emissions. RTOs and TOs have been upgraded to increase their destruction removal efficiency (DRE).

Together, says Peng, these actions have reduced VOC emissions from about 500 tons to about 140 tons per year in the future, an achievement that was rewarded with a Shanghai Green Supply Chain Award from the Shanghai EPB and an EHS Achievement Award from 3M.

“We will work to continue to bring this number down, but it's encouraging to see the results we've been able to achieve in the last couple years,” says Peng.

And just so the facility's emissions-advanced products themselves don't get overlooked, it should be noted that the facility manufactures a wide range of water- and solvent-based, low-VOC, and GREENGUARD™ certified adhesives for some of the most demanding applications in the world.

“Whenever customers are ready to go greener,” says Peng, “3M Shanghai Xin Qiao is ready to take them there.”



# Cordova, Illinois

## 3M facility spotlight

The population of Cordova, Illinois, is less than 700.

So, it stands to reason that with more than 480 employees working at the 3M facility in that community, many of these employees come from well beyond the city limits.

It also explains why, when it comes to stepping up to improve the lives of people living in the area, the people at 3M Cordova put few boundaries on their efforts. More on this in a few paragraphs.

First, let’s talk business.

Opened in 1970, 3M Cordova makes a wide variety of specialty chemicals and adhesives. At Cordova, they blend, react, and purify hundreds of products using a wide variety of technologies throughout the facility. Ultimately, these products are used by other 3M manufacturing facilities or go into industrial, commercial, and consumer applications around the world for a broad range of customers.

Novec™ 1230 Fire Protection Fluid is one example of a product being produced at this high-tech facility. Novec 1230 is a clean agent fire extinguishant, which was developed as a halon replacement and hydrofluorocarbon (HFC) alternative.

Mike Parent, 3M Cordova Plant Manager, is in contact with managers of the other four divisional facilities at least once a week, often comparing notes on topics related to Sustainability.



“One area we are focused on now is waste-to-energy streams. We’re actively identifying outlets that can convert our waste materials to energy,” says Parent.

Rich Stutzki, Environmental Health, Safety and Regulatory Manager at Cordova, says the facility has also been active in developing and executing 3M Pollution Prevention Pays (3P) projects, since that program began in 1975. Throughout the history of the program, the facility has implemented more than 500 3P programs, large and small, that have prevented over 145.8 million pounds of air, water, and waste pollution.

### A spirit of giving that goes for miles

As mentioned, 3M Cordova employees come from a broad radius of communities in northwest Illinois and northeast Iowa. This leads to involvement in a wide range of volunteer and fund-raising projects, which are directed by the facility’s Community Giving Committee and often suggested by individual employees with a passion for various causes.

“Through the year,” says Stutzki, “we average one fund raiser a month at the facility. One month it’s for a Suicide Prevention organization in Camanche, Iowa; the next month we’re helping to buy food for a food shelf in Fulton, Illinois. Around the holidays we have a sharing tree that inspires employees to buy gifts for children in families who can’t afford to buy them on their own. Projects like this are happening all the time, in addition to year-long volunteer efforts by many employees.”

“In a way, supporting our communities is a lot like addressing Sustainability issues in our facility,” says Parent. “Our people are always looking for ways to make things better for the community. Whether it is improving our Sustainability performance, volunteering for local charitable organizations, or getting active in their communities in a number of ways, like coaching or volunteering with local fire departments.”

Learn more on 3M Cordova: [here](#).



# Who we are

Introduction	46	Global challenges	52
3M Value Model	48	2025 Sustainability Goals	60
Our Vision	49	Communities	64
Our Values	49	Employee diversity and inclusion	72
Our Strategic Sustainability Framework	51	Recognition	80

**We are committed to apply science to improve every life.**

**A sense of purpose is at the heart of how we approach every business, every idea, every product, every community, and every life we touch.**

It is the foundation of all that follows. Reflecting our core purpose, 3M employees are empowered and encouraged to pursue purpose-driven innovation.

Working in a highly collaborative environment, our scientists use [46 core technology platforms](#), ranging from adhesives and abrasives, to sensors and electronics materials. They leverage these technologies to invent unique, customer-inspired products that touch our lives at home, at work, and in our communities.

Sustaining our business, and our planet, means protecting natural resources and empowering individuals and communities throughout the world to encourage progress. And above all else, it means uniting under a common goal: Improve every life.

Imagine a world where every life is improved — where natural resources are readily available, people have access to education and opportunity, and communities are safe, healthy, connected, and thriving.

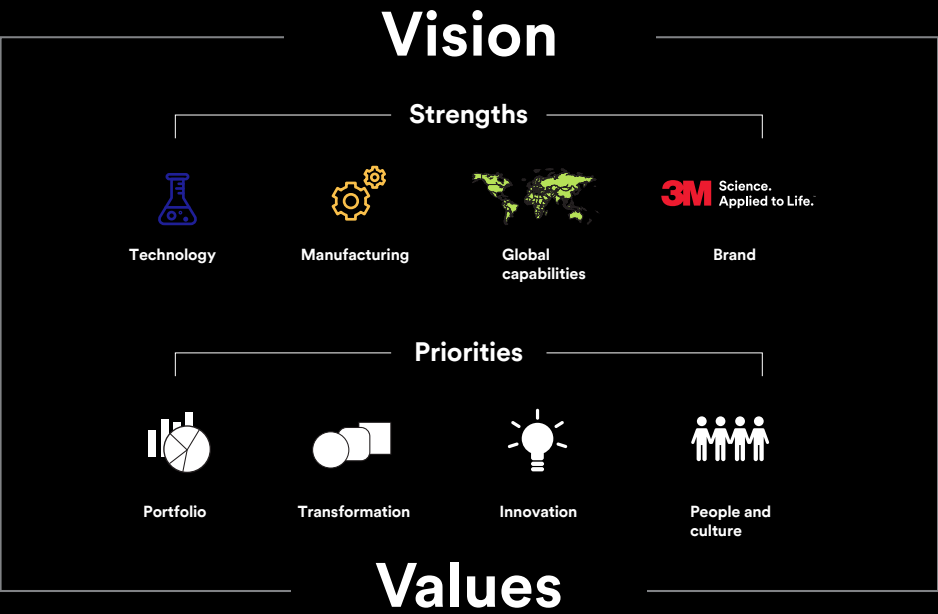
We aim to help make that world a reality by designing a world where 9 billion people can thrive by applying boundaryless, collaborative science to sustain the products, processes, and systems that improve every life. The resilience of our planet, our people, and our business demands it. This is the continued story of our purpose: #improvinglives.



# 3M Value Model

3M’s actions are guided by our Vision and Values of uncompromising honesty and integrity. We are proud to be recognized worldwide as an ethical and law-abiding company. As a company, we are committed to sustainable development through environmental protection, social responsibility, and economic success. Our Value Model makes us unique among companies and differentiates us in the marketplace. This Value Model links our Vision, our fundamental strengths, the priorities we’re driving, and our Values as a company.

The power of 3M comes in how we connect our fundamental strengths to customers, and our fundamental strengths support the heart of 3M: Technology, manufacturing, global capabilities, and brand.



## Our Vision

3M continues to be inspired and motivated by our corporate Vision, which guides our work every day:

**3M Technology**  
*Advancing Every Company*

**3M Products**  
*Enhancing Every Home*

**3M Innovation**  
*Improving Every Life*

Our Vision helps define what we do, how we do it, and where we do it: advance, enhance, improve. It’s about how we do it with our technology, our products, and our innovation. It’s about where we do it for our customers. And it’s aspirational: Improve every company, every home, and every life — that aspiration drives us as we look to the future.

In short, this Vision serves as a daily reminder to all of us of what the 3M Brand stands for.

## Our Values

The [3M Code of Conduct](#) is truly what it means to be a 3M employee. Our Code is about building trust with stakeholders — and doing so through the dedication of every employee to never compromise that trust. It’s about every employee “being 3M”: inclusive, respectful, encouraging, challenging, and the champions of diversity and Sustainability.

How do we become the most inclusive enterprise we can be? By attracting top talent around the world. That leads to a much more diverse 3M, a stronger 3M, a more creative 3M, a higher-performing 3M.

An essential value is supporting the individual: respecting, encouraging, and challenging everyone in the company to be the best they can be — and that requires the culture to make it happen. With the support to reach their best, 3M employees succeed in their individual careers, as part of team, and as part of the entire enterprise.

3M’s Value Model requires an intense focus on Sustainability. In all aspects. It is at the heart of our innovation. What we do in Sustainability is what we practice in our operations; it’s what we practice across our enterprise.

Taking these actions will truly enable us to drive our Value Model sustainably into the future.

# Apply science to improve every life.

## Our Strategic Sustainability Framework

Advancing Sustainability for 3M is a priority. It's not just for 3M, it's for all of our stakeholders. It's at the heart of who we are.

We have set a clear commitment and an ambitious, long-term strategy for our business. One that will leverage

our passion for science. We believe this is what makes us uniquely capable to deliver on our purpose. Our intent is to use our passion and science-based approach to tackle challenges most material to 3M, and critical to the Sustainability of our planet, and the people living on it. That is why we are committed to three priority areas:

**Science for Circular,**  
**Science for Climate,** and  
**Science for Community.**

These priority areas build off the strength of our existing 2025 Sustainability Goals as we apply science to improve every life. They also guide business decisions and strategy, as well as how we focus our efforts for local and global community impact.

### Science for Circular



Design solutions that do more with less material, advancing a global circular economy.

### Science for Climate



Innovate to decarbonize industry, accelerate global climate solutions and improve our environmental footprint.

### Science for Community



Create a more positive world through science and inspire people to join us.



# Global challenges

Looking at Sustainability in terms of shared global needs.

## Our commitment

Science operates within a set of rules. It follows specific methods. It delivers proof and proves cause and effect. But science also breaks boundaries, challenges the status quo, and improves lives.

As a company rooted in scientific exploration and the belief that every problem has a solution, we are applying our technological expertise to help solve some of the world's biggest challenges on raw materials, water, energy and climate, health and safety, and education and development. The challenges we must tackle for a sustainable future don't always follow clear rules or methods — but we see them clearly. They are broad. They are interrelated. They are solvable. We know science can help tackle them.

We are looking at ways to build purpose into leadership and talent development across the company, to recognize business opportunities that help the company grow while addressing societal issues. We cut across industries and silos to collaborate with suppliers, customers, and communities by working together toward building a more resilient world. We have a unique opportunity to apply our passion and collaboration to help the world prosper.







Raw materials

The world’s population is growing larger, living longer — and consuming more. With this increased pressure on our finite natural resources and materials, we must move beyond low-cost, recyclable materials to renewable products. Companies that address this issue not only help the planet, they gain a competitive advantage in the marketplace.

Improving raw material usage through product design and operational considerations provides benefits throughout the supply chain in material use, energy, and transportation efficiency.

We will continue to innovate into the future, developing renewable alternatives for impacted resources, revolutionizing recyclable materials, and becoming more sustainable.



Water

People consume it, farm with it, and manufacture products with it. Reducing water consumption and improving water quality are important elements of water stewardship. Aging infrastructure and increased demand must be addressed to assure socially equitable, environmentally sustainable, and economically beneficial use and treatment of water.

Some of our customers are finding it difficult to source or deliver clean, accessible water. We help them solve this problem by developing technology that increases water efficiencies and improves quality.

We will continue to work to reduce our corporate water footprint and offer products that enhance water quality, respecting and protecting this important resource.



Climate and energy

Access to a dependable energy supply directly affects all businesses and communities. From air emissions to fossil fuels, 3M takes a proactive and collaborative approach to addressing energy demand and climate change — in our operations and for our customers.

Energy usage and climate concerns require systemic change, and we’re here to help drive that forward. Partnering with our customers will help us understand their needs and address those needs. The issues surrounding effective use of energy resources and climate change are complex and interconnected.

We will continue to seek solutions that promote energy conservation, clean energy infrastructure, and reductions in greenhouse gas emissions.



Health and safety

Global health and safety issues are prevalent in workplaces around the world. Governments, corporations, and consumers are driving global demand for safety, protection, health care, and food safety solutions. Creative innovation, technology, education, and collaboration are all critical if we are to tackle these human health and workplace safety concerns.

For decades, 3M has had entire business divisions focused on creating products and services for human health, protection, security, and safety. We are committed to helping improve the health and safety of people worldwide so we can all focus on what matters most to us.

We also embrace this commitment for our own operations and, to that end, will continue to take steps to protect our most important asset — 3M employees.



Education and development

At 3M, we believe science is just science until you use it to improve the world with the products and services we offer. Our science not only impacts our customers, but also makes a difference in the way we work.

As a technology company, 3M recognizes the importance of well-trained science, technology, engineering, and math (STEM) graduates as well as the critical need for a skilled workforce in advanced manufacturing and vocational skills — we need bright minds to step into specialized roles and help our company and our customers solve future challenges.

We will continue to support empowerment and enrichment to enable people everywhere the opportunity to live life to their fullest potential.



## Our actions

Along our journey, we seek internal and external input on top social, economic, and environmental global challenges. We utilize this information to inform both our reporting and strategic planning. As a science-based company, we include among our stakeholders customers and consumers, investors, government agencies, industry organizations, subject-matter experts and academia, non-government organizations, and other corporations.

## Stakeholder engagement

3M’s stakeholder engagement strategy on priority focus areas continues to evolve. We continually look to our stakeholders to help us increase understanding, broaden our awareness, seek technical input and expertise, and evaluate possible collaborations and strategic partnerships. We rely on their counsel and expertise to help guide us. We believe stakeholder engagement should be based on candid and authentic dialogue — grounded in the company’s values — and should contribute to the evolution of our strategic priorities.

Levels of engagement with stakeholders vary greatly by geography, type, and function. For example, 3M employees globally are engaged frequently through Sustainability communications and events with diverse content based on our materiality topics.

## Materiality assessment

In 2014, 2016, and 2018, 3M commissioned GlobeScan, an independent research consultancy, to assist us in better understanding our stakeholders’ perspectives of key issues, and assessing our corporate reputation and leadership opportunities.

Through an in-depth interview process conducted for the 2018 assessment, stakeholders shared their short (0 to 1 year), medium (1 to 5 years), and long-term (10-plus years) expectations for 3M. As part of the process, they revisited top focus areas identified in 2016 compared with current areas.

Stakeholders included in the comparative assessment were academia, consultants, customers, governmental/regulatory agencies, group purchasing organizations, non-government organizations

(NGOs), trade unions, 3M retirees, and non-3M private-sector businesses. At the same time, 3M conducted a similar process through an internal online employee survey. Following completion of the interviews, GlobeScan analyzed insights and inputs from the stakeholders to develop our evidence-based focus area matrix.

From this matrix, 3M and the readers of this report can understand stakeholder expectations of the degree of importance our stakeholders place on each issue, the ability of 3M to make a positive difference on the issue, and the level of impact an issue may have on our reputation.

## Past, present, and future focus areas

From our 2018 assessment, the top focus areas for stakeholders center around climate change, waste from operations, fresh-water shortages, energy use, human rights, and the reduction of toxic substances. Most of these focus areas were perceived to have increased in importance since 2016, along with scarcity of raw materials, water quality, social equality, and ethical business.

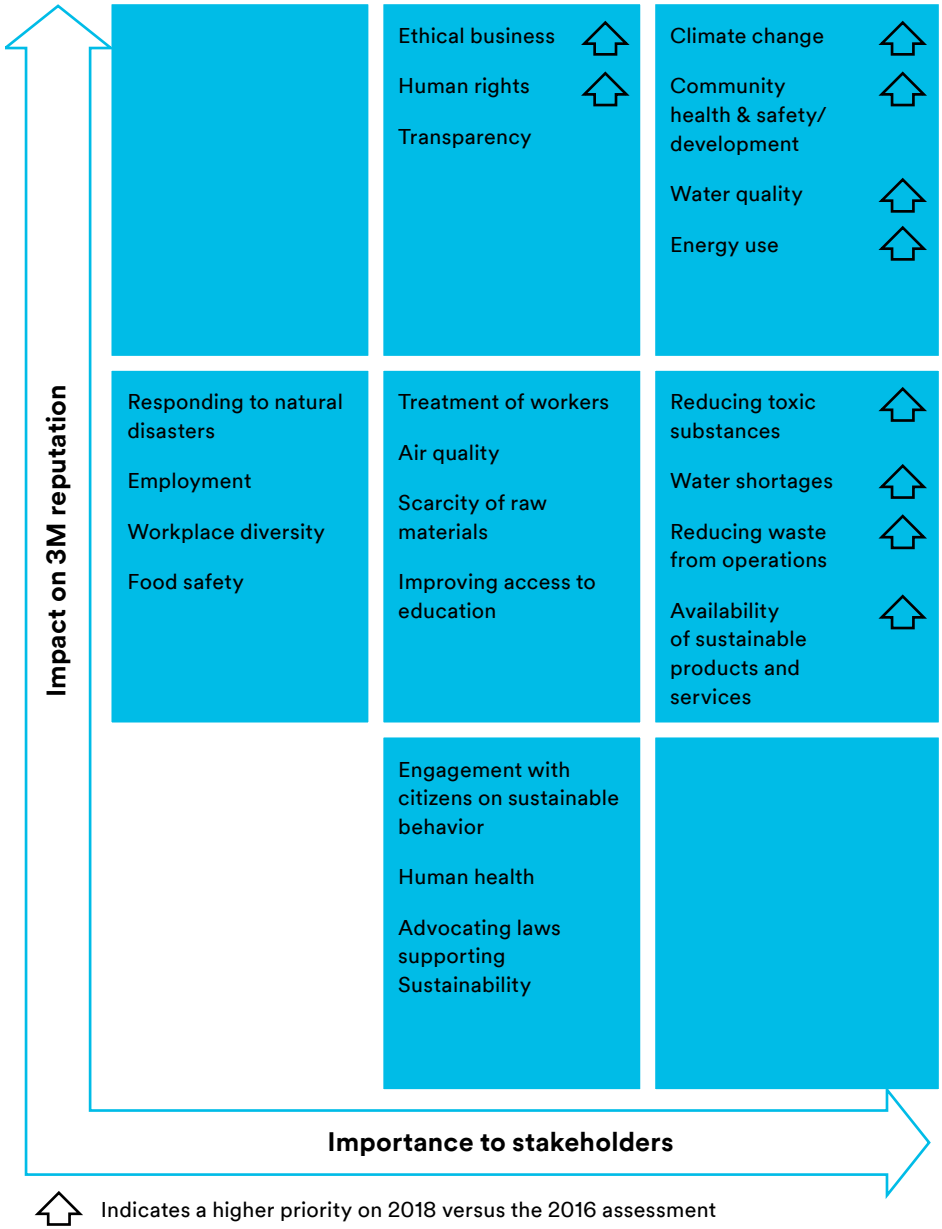
The feedback from this assessment

was incorporated into our consideration for our Strategic Sustainability Framework, milestones, and actions as we continue to evolve and advance our company purpose. Moving forward, we will continue a consistent rhythm to produce a comprehensive third-party focus area (materiality) assessment.

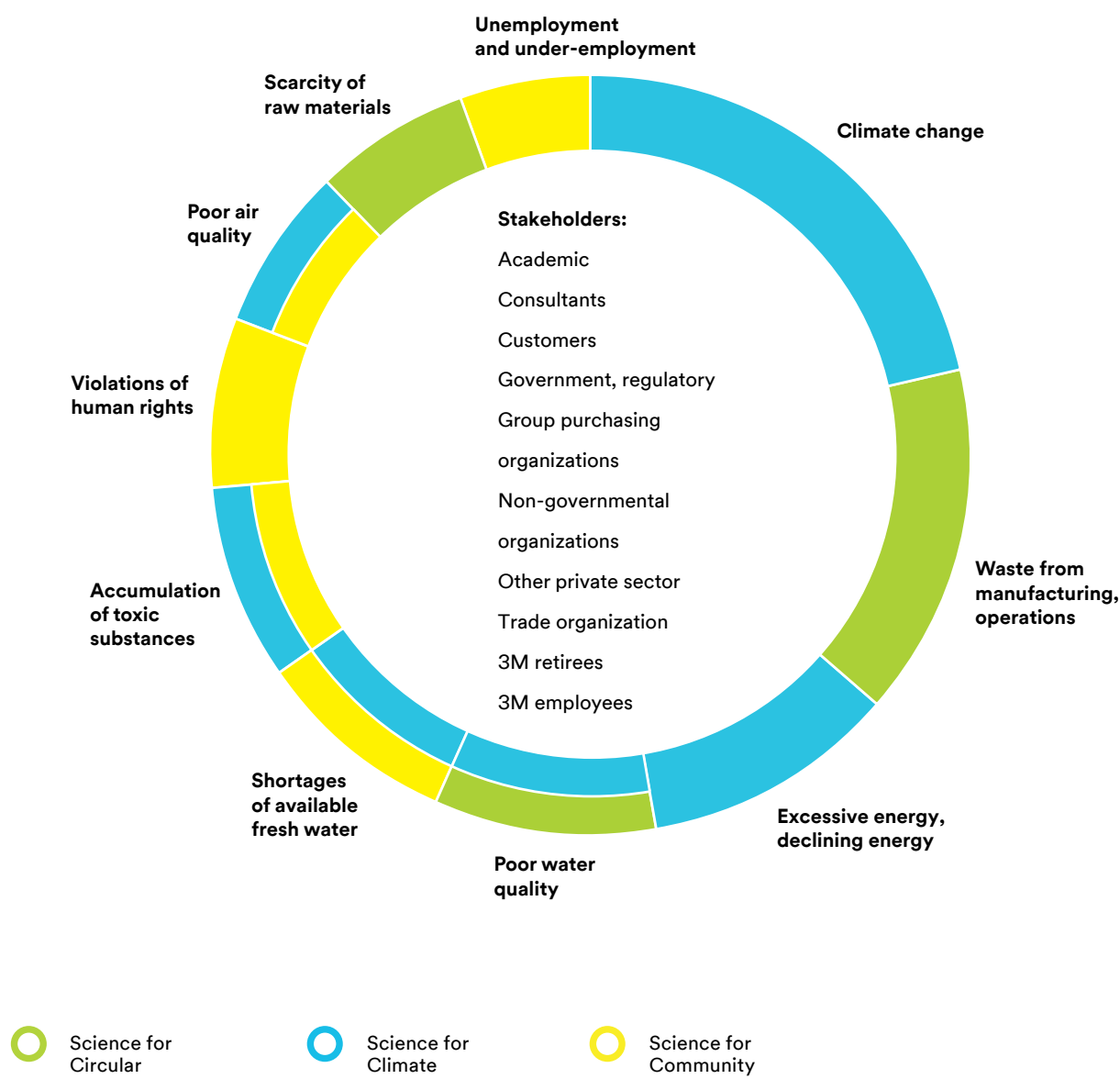
Data provided in this report includes information on issues that were found through this assessment to have the highest potential to impact our reputation and that are of great importance to internal and external stakeholders. Because we are a diversified company, several other environment-related topics and performance indicators relevant to various sectors of the company are also included in the report. 3M’s Science, Technology, and Sustainability Committee reviews, approves, and assures material topics are covered in our Sustainability Report.

All material aspects defined within this report are deemed material for all entities within the 3M organization. The prioritization for the different aspects may vary within 3M operations and geographies, but they are still material.

## 2018 focus area assessment



Stakeholder key focus areas



Membership and partnership

External engagements and collaboration efforts on priority focus areas help provide us with diverse viewpoints, a better understanding of the positions of our stakeholders, and a mechanism to learn from the successes and failures of our peers, all of which contribute to our commitment to purpose-driven business.

As part of GlobeScan’s 2018 interview process, a series of questions were framed on engagement tactics to better communicate with relevant stakeholders. From these interviews, we learned stakeholders mention a variety of groups to prioritize, including customers/ consumers, local communities, investors, government agencies, and NGOs. In addition, they preferred communication that is simple, intuitive, and easy to understand such as this report, blogs, and new releases. This aligns with our current engagement practices.

Looking forward

The world around us is changing fast. Waste and resource scarcity threaten our natural systems and every species. Climate change is accelerating and endangers everyone’s well-being. People around the world will need to come together to create a more positive future in which everyone can thrive. More than ever, we need science. The resilience of our planet, our people, and our economy depends on it.

We believe we can help, and this is our purpose. That is why we are committed to three priority areas — Science for Circular, Science for Climate, and Science for Community — and it is why we are reinventing the products, processes, and systems that will improve every life. We are transforming our business and putting science to work for the greater good.



# 2025 Sustainability Goals

Important journeys start with calculated steps.

## Our commitment

We have been setting global environmental goals at 3M since 1990. A strong part of our company history, these goals have helped dramatically reduce our own environmental footprint and established us as a leader in environmental stewardship.

Stakeholders increasingly expect companies to do things that benefit society in more direct ways and are not solely focused on benefits to the company. That is why we made such an active effort to involve stakeholders when we developed our 2025 Sustainability Goals. These goals go well beyond advancing our environmental stewardship efforts. They are framed around global challenges.

This is apparent when one considers how well our goals align with the United Nations 2030 agenda for Sustainable Development released in 2015. This agenda, including 17 sustainable development goals (SDGs), is designed to build upon the historic work of the Millennium Development Goals and stimulate important action in three dimensions of sustainable development: economic, social, and environmental.

We set our goals with the perspective that we have to succeed as a company while also supporting the communities where we operate. It's a two-pronged approach that is both practical and thoughtful — and filled with the integrity 3M is known for.

Our view of Sustainability is about finding those intersections where our goals move us forward toward growth while supporting the company Vision to advance, enhance, and improve.

Sustainability at 3M also includes collaborating to find better solutions for customers. The way we see it, global challenges must be addressed together to assure we can all live healthy, fulfilling lives. That's why we are committed to partnering with customers to identify and collaborate on solutions to help them address their goals.



### Raw materials

Respect our planet's resources and reimagine waste as a nutrient to assure we have abundance for future generations.



### Water

Promote clean water for everyone, everywhere, so that every person, business, and community has the water they need to thrive.



### Climate and energy

Transform the way the world uses energy, because it impacts the climate, and the climate impacts everyone.



### Health and safety

Improve the health and safety of people worldwide, so we can all focus on what matters most to us.



### Education and development

Support empowerment and enrichment to provide people everywhere the opportunity to live life to its fullest.



### Raw materials

Invest to develop more sustainable materials and products to help our customers reach their environmental goals.

Reduce manufacturing waste by an additional 10 percent, indexed to sales.

Achieve "zero landfill" status at more than 30 percent of manufacturing sites.

Drive supply chain Sustainability through targeted raw material traceability and supplier performance assurance.



### Water

Reduce global water use by an additional 10 percent, indexed to sales.

Engage 100 percent of water-stressed/scarcie communities where 3M manufactures on community-wide approaches to water management.



### Climate and energy

Improve energy efficiency indexed to net sales by 30 percent.

Increase renewable energy to 25 percent of total electricity use.

Ensure GHG emissions at least 50 percent below our 2002 baseline, while growing our business.

Help our customers reduce their GHGs by 250 million tons of CO<sub>2</sub> equivalent emissions through use of 3M products.



### Health and safety

Provide training to 5 million people globally on worker and patient safety.



### Education and development

Invest cash and products for education, community, and environmental programs.

100 percent participation in employee development programs to advance individual and organizational capabilities.

Double the pipeline of diverse talent in management to build a diverse workforce.

# Our actions

In 2018, we entered the third year of an ambitious 10-year goal cycle. The 2025 Sustainability Goals we are now pursuing reflect a heightened commitment to going beyond compliance and thinking holistically about how our operations and products affect the world and every life in it. We see the opportunity, in the next decade, to create systemic change that addresses global Sustainability challenges involving raw materials, water, climate and energy, health and safety, as well as education and development. For additional information on the development of our 2025 Sustainability Goals, see [global challenges](#).

## Making progress toward 3M’s 2025 Goals

### 2018 Progress



### Raw materials

- **Launched Sustainability Value Commitment;** advancing goal of developing more sustainable materials and products
- **Reduced manufacturing waste by 11.7%, indexed;** exceeding goal of 10% reduction
- **30.4% (56 manufacturing facilities) zero landfill;** exceeding goal of 30% of manufacturing facilities
- **Revised and re-launched our Supplier Responsibility Code;** maintaining our commitment to drive supply chain Sustainability through targeted raw material traceability and supplier performance assurance



### Water

- **Increased water use by 0.7%, indexed;** behind goal of 10% reduction
- **100% (25 facilities) located in water stress/scarc areas engaged;** maintaining goal of engaging 100%



### Climate and energy

- **Improved energy efficiency by 2.8%, indexed;** toward goal of 30% improvement
- **Increased renewable energy footprint 26.8%, total electricity use; exceeding goal of 25% increase**
- **Scope 1 and 2 emissions 63.7% below baseline;** ahead of goal for 50% below baseline<sup>1</sup>
- **Over 40 million metric tons CO<sub>2</sub> equivalent customer avoided emissions;** toward goal of 250 million metric tons



### Health and safety

- **Provided 98,900 training instances through eLearning platform;** toward goal of 5 million training instances<sup>2</sup>



### Education and development

- **\$66.3M investments in total global giving;** toward goal of continuing to invest in global giving programs
- **50+% participation in employee development programs;** toward goal of 100% participation
- **Increased pipeline of diverse talent in management by 5.7%;** toward goal of doubling the pipeline

<sup>1</sup> 2002 baseline year; all others have a 2015 baseline.

<sup>2</sup> Value represents 2018 relearning training instances only.

Looking forward

We’ve made such significant progress on our 2025 Sustainability Goals, we’re raising the bar. Moving forward through our Sustainability leadership framework, we are cutting across industries and silos to collaborate with suppliers, customers, and communities by working together building a more resilient world. We at 3M have the unique opportunity to apply our passion and collaboration to help the world prosper. The milestones established with our new framework will enhance and continue to grow our existing 2025 Sustainability Goals and commitments.

Our customers, and the communities in which we operate, deserve it. Our people are motivated by it. Our future will be all the better for it.



# Communities

## Creating a more positive world through science, and inspiring others to join us.

### Our commitment

3M helps build sustainable communities through strategic investments and the thoughtful involvement of 3M businesses, facilities, and employees worldwide, who volunteer and leverage their skills and experience to make a difference.

The primary social investment arm of 3M is 3Mgives, which maximizes social impact by combining 3M employee expertise with our products, technologies, and philanthropy. 3Mgives develops and implements strategy, and partners with leading community organizations that have a proven track record for delivering results. Oversight is provided by the 3M Foundation Board of Directors and Corporate Contributions Committee, comprising senior-level executives in the company.

To assure that our support brings maximum benefit to the communities being served, 3Mgives assesses the impact of prior grants and employee engagement initiatives to inform future engagement, and provides signature partners with financial support to help evaluate outcomes.

### 2025 Goal: Invest cash and products for education, community, and environmental programs.

We continue to invest in increasing access and opportunity for all people worldwide to succeed in science, technology, engineering, and mathematics (STEM) and business fields, and to improving the quality of every life through investments in environment and community programs. Cash, in-

kind investments, and employee engagement remain core to our 3Mgives strategy. Since 1953, we have invested \$1.65 billion in cash and product contributions in 3M communities.

### Our actions

#### Empowering the next generation

3M empowers the next generation of scientists and engineers by supporting education initiatives that advance equitable outcomes in STEM and business for underrepresented and underresourced students.

#### Community training resources.

As manufacturing evolves and companies like 3M invest in facilities of the future, it is essential that our local technical schools and high schools get access to appropriate technologies and training. Here are three programs 3Mgives is investing in to help keep the workforce pipeline flowing:

- The 3M Manufacturing and Academic Partnership (MAP) program provides manufacturing equipment, teacher training, and student scholarships through partnerships with high schools and technical colleges in communities where we operate. In 2018, we supported 30 high schools, 10 community and technical colleges, and we provided nearly 50 scholarships. For additional information on one effort, see [here](#).
- Since 2013, 3Mgives has helped to close the workforce gap across many industries around the world by supporting WorldSkills™ and SkillsUSA, two programs that provide forward-thinking educational programs, events, and competitions. More on skilled trade development can be found: [here](#).

- 3M has been a sponsor of the Society of Women Engineers (SWE) for many years and upped our support in 2018 when thousands of female professionals, students, and educators from across the U.S. convened in Minneapolis, Minnesota, at the year's largest gathering for women in engineering and technology — the SWE Annual Conference. Close to 100 3M employees from all over the country attended, and many spoke on panels during the event. A 3M grant of \$100,000 went toward the conference, including professional development programs for college students and working engineers. Learn more about this and other 2018 academic support initiatives: [here](#).

#### A science curriculum for teachers.

Teachers are the most important school-related factor in influencing student achievement. That is why, for 34 years, 3M TWIST (Teachers Working in Science and Technology) has been one of 3M's signature science encouragement programs, helping teachers gain practical knowledge of scientific concepts to enhance students' classroom experience. Since 1984, 3M has helped 40 teachers improve their classroom instruction by providing an annual

opportunity to experience science in 3M labs and manufacturing facilities and discover the ways we apply that science to real life. Learn more on supporting science and technology teachers: [here](#).

#### STEM-equity support.

To support efforts in communities where our facilities are located, 3M, in 2018, awarded grants to 14 organizations with effective STEM-equity programs.

- Soar Detroit in Michigan, nominated by 3M Detroit, for a program to provide one-on-one classroom reading tutors for first, second, and third graders at two schools where reading test scores were low
- Harrison County Board of Education in Kentucky, nominated by [3M Cynthiana](#), to provide high-quality, hands-on STEM programming to middle and elementary school students through Project Lead the Way. Plant engineers from 3M Cynthiana also visit schools to support these programs

- University of Wisconsin-Stout, nominated by 3M Menomonie, to hold a STEPS for Girls camp, where 160 middle-school girls built a robot, participated in leadership development, interacted with female industry professionals, and toured local manufacturing companies

**One giant STEP for student.**

Each year for 47 years, the 3M Science Training Encouragement Program (STEP) has offered a nine-month science encouragement experience to underrepresented and underresourced students located near 3M’s headquarters in St. Paul, Minnesota. In 2018, 37 junior and senior high school students had the opportunity to participate in on-site science training, mentorship with 3M scientists, and hands-on experience in 3M labs in the summer. Learn more on 3M STEP: [here](#).

**Inspiring employees to make an impact**

By investing in programs promoting a circular economy, the fight against climate change, and creating a more positive world through science, 3M inspires employees to make an impact on the world.

**Passion making a difference.**

When asked why they love to work for 3M, many employees say they enjoy making a difference in the world. To draw on this passion, the company offers a program called 3M Impact, where employees travel to communities around the world. Learn more on 3M’s Impact program: [here](#).

**Post-graduate learning opportunity.**

The 3M Optimized Operations Experience (O2 Engage) is a manufacturing and supply chain development program that provides recent engineering, supply chain, and environmental, health and safety graduates the opportunity to jump-start their careers. 3Mgives partnered with the O2 Engage program in 2018 to embed a social responsibility project into the program, enabling O2 employees to utilize their skills to positively impact the community. Learn more on O2 Engage: [here](#).

**A world of volunteers.**

Now in its fifth year, 3M Global Volunteer Day brought 3M employees from around the world together to make

all of our moments matter for collective impact internationally. Examples of these efforts:

- 3M France participated in several activities: helping transform an old fort in a Paris suburb into an urban farm and cultural site, sorting clothing for migrants, painting murals at children’s facilities, and making dolls for children as part of The United Nations International Children’s Emergency Fund (UNICEF) program
- 3M China established a 3M STEM education base at primary schools covering Beijing, Shanghai, Guangzhou, Chengdu, and Suzhou. Volunteers attended the events and contributed their volunteer hours. The programs aim to inspire students’ curiosity about science and foster their creativity through innovative educational experiments and experiences. In addition, 3M announced that its R&D center in China will be open to students who are from the 3M STEM education base

**Standing out among standouts.**

For the past 32 years, the 3Mgives Volunteer Award has celebrated extraordinary 3M volunteers who generously share their time and talents to improve lives in the areas of education, community, or the environment. In 2018, [29 awardees](#) were honored globally, including:

- Deborah Diaz, Trade Marketing and Corporate Marketing Manager in Puerto Rico, who was honored for her work coordinating and engaging fellow 3M employees in relief and recovery efforts following the destruction of hurricanes Irma and María. Her efforts included securing essential supplies, organizing volunteer outreach, and fostering alliances with other local organizations
- Mary Ann Demition, Advanced Application Engineer in the Philippines, who was honored for sharing the wonder of science with schoolchildren as a 3M Visiting Wizard. She has also organized school supply donations for Tibag Elementary School, an underresourced school in a remote area of her country
- Kathy Barber-Clark, Account Manager, Consulting Operations in

Atlanta, Georgia, who was honored for her work with the Warren Boys & Girls Club. In addition to coordinating 3Mgives and 3M Sales Connection events for the Boys & Girls Club, Kathy started the STEM Wizard summer learning program and assists with homework and mentoring programs to help prepare youth for the future

- Mauricio Baeza, Finance Manager in Chile, who was honored for his work with United Way Chile — serving as director, treasurer, and liaison between 3M and the United Way to support the education of children with limited resources. In addition, Mauricio participates in a youth mentorship program

**Big hearts, matched.**

As part of the 3M Volunteer Match program, 3M donates money to eligible nonprofit organizations for which a 3M employee or retiree volunteers 25 hours or more per calendar year. Since 2000, the company has donated \$7.91 million in 3M Volunteer Match dollars to support 5,500 schools or non-profit organizations throughout the U.S. In 2018, the match doubled from \$250 to \$500. The number of participants increased 16 percent.

- In related news, 3Mgives launched a one-stop web shop for community engagement, My 3Mgives. The new portal enables 3M employees to find volunteer opportunities based on ZIP code or preferences, and to request matches, including Volunteer Match

**Giving that starts at home.**

In 2018, 3M launched a new Community Giving Campaign to provide more options for employees to support organizations they are passionate about, with 3M matching dollars now following employee gifts. The program produced an expanded giving footprint, tripling the number of organizations from last year’s campaign. With a maximum of \$500 in corporate support per employee, 3M employees stepped up to invest more than \$3 million in current donations and 2019 pledges. When including the 3M match, this equals more than \$4.5 million in donations to help solve our communities greatest needs.



2018 giving by focus area				
	Cash	In-kind	Total	Volunteer hours
Community	\$17,500,000	\$11,700,000	\$29,200,000	243,000
Education	\$14,800,000	\$19,000,000	\$33,800,000	78,500
Environment	\$3,320,000	\$5,110	\$3,330,000	11,300
Total	\$35,600,000	\$30,700,000	\$66,300,000	333,000
Values presented in this table represent the most current values, in \$USD, but are still subject to change. Total may vary due to rounding. Volunteer hours include employees and retirees.				

2018 global giving by region				
	Cash	In-kind	Total	Volunteer hours
Asia Pacific	\$1,610,000	\$652,000	\$2,260,000	6,720
Europe, Middle East, Africa	\$457,000	\$96,900	\$554,000	11,000
Latin America	\$2,200,000	\$91,400	\$2,290,000	8,950
Canada	\$697,000	\$720,000	\$1,420,000	4,200
United States	\$28,200,000	\$25,000,000	\$53,200,000	302,000
OUS, region not defined	\$2,470,000	\$4,060,000	\$6,530,000	—
Total	\$35,600,000	\$30,700,000	\$66,300,000	333,000
Values presented in this table represent the most current values, in \$USD, but are still subject to change. Totals may vary due to rounding. Volunteer hours include employees and retirees.				

## Enhancing community vibrancy

3M enhances community vibrancy by assuring access to basic needs, preparing youth for lifelong success, increasing access to diverse arts opportunities, and contributing to global humanitarian relief efforts.

### GO-power for NGOs.

3M worked with the National Association for the Exchange of Industrial Resources (NAEIR) to provide needed materials and supplies to a multitude of nonprofit organizations, from hospitals to schools to shelters. In addition to streamlining 3M’s excess product donations process, NAEIR is a 3Mgives strategic partner, administering the 3M Supplies for Community Partners and the 3M Supplies for Schools product donation programs in 3M communities across the U.S.

### A natural response to natural disasters.

In 2018, devastating disasters occurred around the world, including flooding in Thailand, an earthquake and tsunami in Indonesia, Typhoon Mangkhut in the Philippines, torrential rains

and flooding in Trinidad and Tobago, California wildfires, and hurricanes Florence and Michael in the southeastern U.S. To support communities impacted, 3M provided cash and product donations valued at more than \$1.94 million to humanitarian aid partners including American Red Cross, Direct Relief and MAP International.

### Big challenges met.

Product donations can be especially critical in times of disaster by enabling relief organizations to respond to immediate needs. In the case of Hurricane Florence, for example, 3M™ Surgical Masks, ScotchBlue™ Painter’s Tape, Avagard™ Hand Hygiene Solutions, ACE™ Bandages, and FUTURO™ first aid products were used for emergency health care services for displaced residents.

- In addition to responding when natural disasters strike, 3M works with our humanitarian aid partners to pre-stock warehouses with supplies commonly used during relief operations. For instance, the American Red Cross stocks their Disaster Field Supply Centers with 3M dust masks and respirators, and includes ScotchBlue™ Painter’s Tape in shelter support trailers to

be used for hanging signage and securing wires in temporary shelters

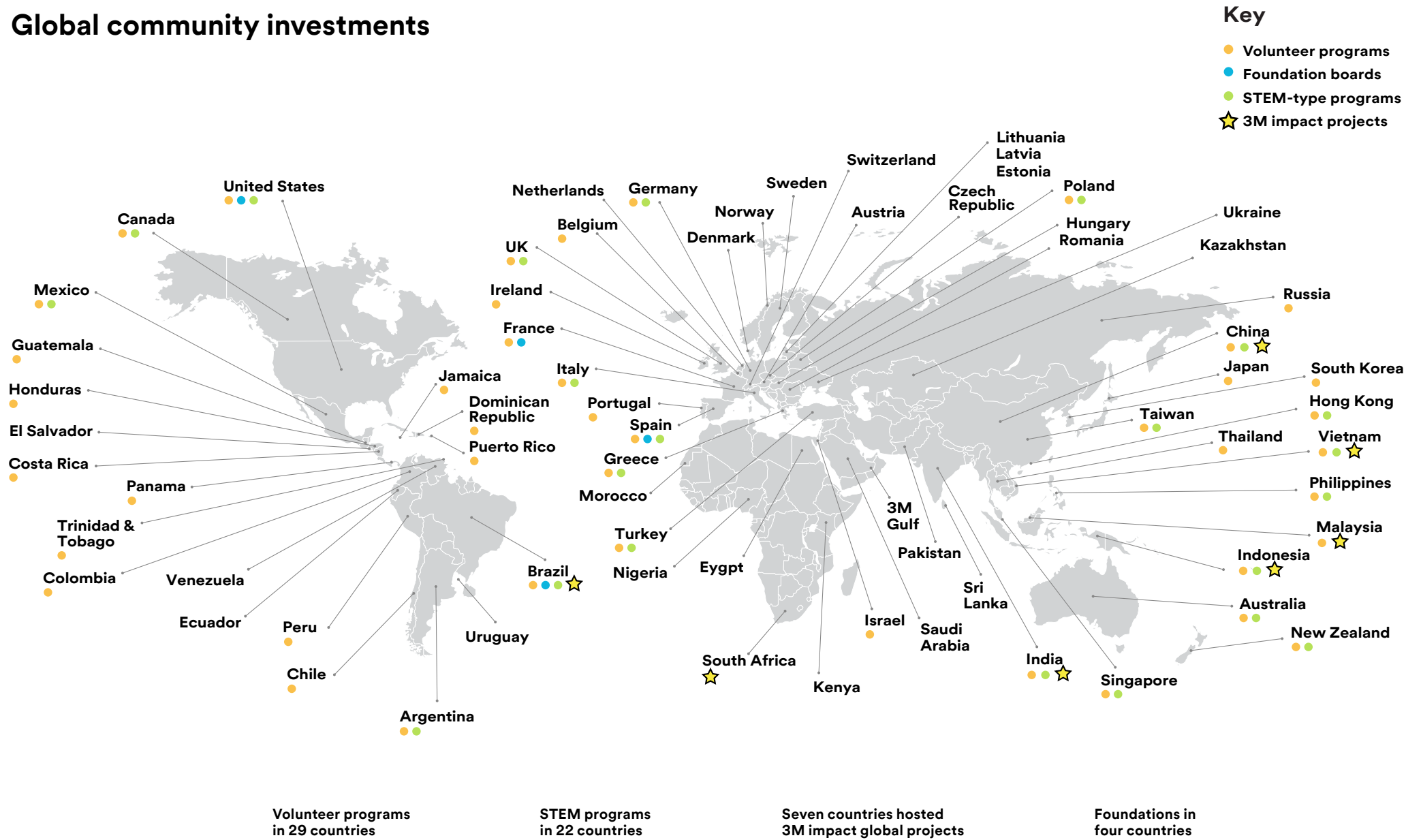
- In 2018, 3M Mexico earned the “Social Impact Company of the Year” award for its response to the major earthquake that hit Mexico City in 2017. The 3Mgives grant helped build eight houses in Mexico City’s Xochimilco neighborhood, one primary school in the state of Estado, toy libraries in Mexico City, and helped rehabilitate the office of Fondo Unido. 3M Mexico’s 3Mgives also organized multiple volunteer events throughout the year to support rebuilding efforts in the area impacted by the earthquake

### Empowering local communities.

3M U.S. locations have their own 3Mgives budgets and the discretion to determine local community needs and giving priorities. In addition, 3M Community Vibrancy Grants promote economic development, youth development, or access to diverse arts programming for underserved populations. For example: In Michigan, 3M Detroit provided a grant supporting the Matrix Human Service’s Osborn Youth Employment Initiative. According to a recent American Community Survey, Detroit’s poverty rate of

34.5 percent remains one of the highest for major cities in the nation. This level of concentrated poverty has had multi-generational impacts on families, making it just as challenging for impoverished youth to succeed as it is for their parents. The Osborn Youth Employment Initiative advances equity by intervening on behalf of this neighborhood’s young people, providing them with new opportunities to explore careers, prepare for college, and find positive employment experiences.

Global community investments



Looking forward

While our international and U.S. giving efforts share a common philosophy, our support for international programs stands out in two ways:

- Support for international programs originating in the U.S. is conducted through intermediary organizations based in the U.S. that have global reach
- Subsidiaries have local community engagement programs focused on social concerns specific to their locations

Our international approach is evolving to expand our reach and build local ownership. Our goal is to increase international cash giving (comprising 3Mgives cash investments and subsidiary cash investments) to 25 percent of total 3M cash giving by 2020.

Throughout 2019, 3M will add depth and direction to the Strategic Sustainability Framework, including Science for Community.



# Employee diversity and inclusion

## A culture that thrives because of, not in spite of, our differences.

### Our commitment

How do we become the most inclusive enterprise we can be? It's about attracting top talent around the world. That understanding leads to a much more diverse 3M, a stronger 3M, a more creative 3M, higher-performing 3M. Diversity and inclusion are the foundation of our Value Model. Our [Value Model](#) comprises the actions we take that make us unique among companies and differentiate us in our marketplace.

The way we look at it, a diverse, global workforce — people with different experience, ethnicity, age, gender, sexual orientation, personalities, styles, and ways of thinking — helps us relate more closely to the needs of all 3M customers, suppliers, and channel partners around the world.

Just as important, we know that inclusion is the key to unlocking the power of diversity. An inclusive culture is one that supports and appreciates differences and provides fair and equal opportunities for everyone — a culture where people realize they are respected for their whole and unique selves, and that they belong. Inclusion leads to engagement, which in turn fosters the collaboration, creativity, and innovation that drive long-term growth, for 3M as well as for our people and our teams.

Above all, creating a culture that supports diversity and inclusion is the right thing to do. Diversity and inclusion are about creating intellectual and emotional oxygen for all people to flourish and

feel comfortable to collaborate, agree, disagree, and respectfully exchange, learn, and create.

Our [Code of Conduct](#) is what it means to be a 3M employee. And that code includes the 3M [Respectful Workforce Principle](#).

**Be Respectful:** We strive to have a work environment that reflects and values the best in all of us, where we treat each other respectfully and professionally, and where individual differences are valued.

3M's Respectful Workplace Principle states that "everyone is entitled to respectful treatment in the 3M workplace. Being respectful means being treated honestly and professionally, with each person's unique talents, background, and perspectives valued. A respectful workplace is free from unlawful discrimination

and harassment, but it involves more than compliance with the law. It is a work environment that is free of inappropriate or unprofessional behavior and consistent with 3M's ethics and values — a place where all employees can do their best, and are free to report workplace concerns without fear of retaliation or reprisal."

To foster this kind of workplace, we follow our [Equal Employment Opportunity \(EEO\) policies](#), which prohibit all forms of discrimination or harassment against applicants, employees, vendors, contractors, or customers on the basis of race, color, creed, religion, sex, national origin, age, disability, veteran's status, pregnancy, genetic information, sexual orientation, marital status, citizenship status, status with regards to public assistance, gender identity/ expression, or any other reason prohibited by law. Our affirmative action policies and programs are designed to assure equal opportunities for qualified minorities, women, covered veterans, and individuals with disabilities, and also to provide reasonable accommodation to individuals with disabilities.

### 2025 Goal: Double the pipeline of diverse talent in management to build a diverse workforce.

Increasing diversity in every region in which we operate is a core part of our Sustainability strategy. Doubling our diverse talent in management positions will ultimately help build a diverse pipeline for executive leadership as well. That said, we recognize that definitions of diversity vary between countries and cultures. The 3M definition of diversity includes gender, race/ ethnicity, nationality, people with disabilities, U.S. military veterans, and people who identify as lesbian, gay, bisexual, transgender, questioning, and intersex (LGBTQI). To measure progress against our 2025 goal, we use the 3M Diversity Index, which represents the total number of diverse future leaders within the company globally.

In the U.S. and in many other countries, we provide our people with the opportunity to opt in to the index research and confidentially provide information such as disability status, veteran status, sexual orientation, and race/ethnicity.

To date, we have made 5.7 percent progress toward this goal, moving from 32.6 percent to 38.3 percent.

### Our actions

Every day, we work to assure that the 3M workforce is representative of the people with whom we do business. This entails strengthening 3M's reputation as a great place for diverse people to work:

- Seeking and attracting diverse and qualified candidates globally
- Building our global pipeline of diverse candidates

Beyond our day-to-day efforts to support diversity in 2018, we also actively promoted initiatives to engage our people, attract the best talent, and make everyone feel safe and included.

### Catalyst CEO Champions for Change

As part of 3M's commitment to building a diverse and inclusive work culture, 3M CEO Mike Roman signed on to Catalyst's CEO Champions for Change

initiative, joining more than 50 CEOs and industry leaders who also have made personal pledges to accelerate gender equality and inclusion in their organizations.

“3M is honored to be part of Catalyst CEO Champions for Change,” said Roman. “Diversity and inclusion is one of our core business strategies because we know that championing a diverse and inclusive global team helps us better serve our customers and build an even stronger 3M. Advancing inclusive leadership advances us all.”

### Different minds inspire

The central thread of 3M diversity and inclusion efforts is our “Different minds inspire” campaign. Initiated in 2017, this campaign continually confirms our inclusive culture, which supports and appreciates differences and provides fair and equal opportunities for everyone. In its inaugural year, the 3M Global Inclusion Index (a baseline measure of how included employees feel in the workplace) was created based on responses to questions in the 3M Standard Opinion Survey. We see that as an endorsement of what’s

been done to date and, at the same time, noticed that there is still more to be accomplished. To further our journey in 2018, 3M established U.S. and global inclusion teams to help fortify our culture of inclusion and drive improvement in their individual organizations’ Inclusion Index results.

As part of the “Different minds inspire” campaign, we focused on communicating around three actions each of us can take to support inclusion: Reflect, Connect, and Wonder.

**Reflect: Identify your own unique strengths.**

Focusing on and understanding one’s own talents, skills, and perspectives makes us who we are and enables us to determine how we can make a difference — and helps us recognize the talents others have to offer, too. For instance, on March 8, partnering with the Women’s Leadership Forum (WLF) on International Women’s Day, participants were invited to discover their unique strengths in a two-part event held at the 3M Center in St. Paul, Minnesota. The day included a panel of 3M leaders revealing how appreciating the

strengths of others helped them set their teams up for success.

**Connect: Understand and appreciate the unique perspectives of others.**

Seeking insights and perspectives from others allows one to learn from their experiences and increases appreciation for other viewpoints. One such event, World Day for Cultural Diversity held on May 21, honored diversity of our people and customers, recognized the importance of intercultural collaboration in solving today’s challenges, and encouraged 3M employees to deepen their understanding and appreciation of other cultures.

**Wonder: Imagine what we can accomplish together.**

Understanding and valuing the dreams, needs, and desires of others fuels our ambition to solve pressing challenges together. For instance, on Wonder Day, September 21, surfboard artist Drew Brophy visited 3M Center in St. Paul to paint a series of five surfboards with artistic representations of how each of the five 3M business groups improves lives, using many 3M products in

the process. Meanwhile, at the 3M Global Service Center in the Philippines, employees participated in a problem-solving activity using tangram puzzles.



To maintain the momentum of the “Different minds inspire” campaign through 2018, 3M took it steps further:

### Learning the score with sports management leaders

Curiosity and collaboration are a powerful combination in business. To delve into what it takes to collaborate effectively, the Diversity and Inclusion team, along with the WLF and the Men as Advocates group, conducted a special event in June of 2018:

“Navigating Your Professional Career: A Conversation with Minnesota Vikings Executives.” The event opened with a keynote address by 3M leader Joaquin Delgado, Executive Vice President of the Consumer Business Group and Executive Sponsor of the WLF. This was followed by a presentation by two leaders of the Minnesota Vikings NFL football management team, who spoke about their career experiences in professional sports and beyond.

### Global Inclusion Day

We turned science inward to explore how inclusion affects the brain and body, and how these results, in turn, can shape our culture as part of our Global Inclusion Day, a day devoted to looking at the science of inclusion — the inherent connection between inclusive behaviors, biology, and well-being.

### Connecting and inspiring Minnesota’s business leaders

On August 10, 3M welcomed Governor Mark Dayton and diversity and inclusion leaders from public and private Minnesota

companies, including Best Buy, General Mills, Medtronic, Target, and US Bank to share best practices for bolstering diversity and inclusion in the workplace. This “Different minds inspire” event gave employers a chance to share their successes, ideas, and challenges as Minnesota seeks to build a workforce that better reflects and includes the rich diversity of its people. The state of Minnesota and 3M hope these partnerships extend into the future, cultivating a network across Minnesota that will allow leaders to continually learn from each other’s successes.

### Employee Resource Networks

3M Employee Resource Networks (ERNs) are nine organizations designed to nurture leadership skills and collaboration across cultures, lifestyles, and genders through events and activities as they align to their mission. Open to all employees, these organizations help 3M recruit, engage, and retain diverse talent and work with our businesses to provide relevant customer insights that can expand our marketplace reach. Learn more by visiting [3M’s ERNs](#).



### ERN Community Champions and grants

Our nine ERNs, in partnership with 3Mgives, created the ERN Community Champions program in 2018. This program, launched on 3M Community Champions Service Day (October 4), connected the ERNs to the faces, voices, and dreams of the community impacted by two societal inequities: education disparity and homelessness. ERN members traveled into the community and engaged experts who helped them better understand current and desired situation dynamics within these two inequities.

### Domestic partner benefits

At 3M, diversity and inclusion is the cornerstone of our organization and essential to innovation. This is why 3M now offers benefits for eligible opposite-sex and same-sex domestic partners of employees, and their eligible dependents. As part of its work, the Diversity and Inclusion team invited employees to learn more about domestic partner benefits, eligibility, available coverages, costs, tax considerations, and dependent certification, and were able to enroll for 2019 benefits.

### New and continuing support for those who serve

3M has expanded paid leave benefits for military training, doubling coverage from two weeks to four weeks each calendar year. This policy change will help 3M employees in the National Guard or Reserve units meet their increasing training requirements in support of our nation. Eligible employees on leave for annual encampment or training may be entitled to differential pay for the difference between their 3M pay and their military pay. For additional details on this policy enhancement, [click here](#) to access the Paid Leave Policy for Military Training.

3M strives to be the premier company for the military community and this policy change reflects our commitment to veterans and the mission of the Military Support Network (MSN). The MSN provides active support and outreach, reoccurring professional development, and focused veteran hiring services to current 3M military veterans, their families, and other military members seeking to join 3M. If you are interested in

being a part of this ERN, email [militarysupport@mmm.com](mailto:militarysupport@mmm.com).

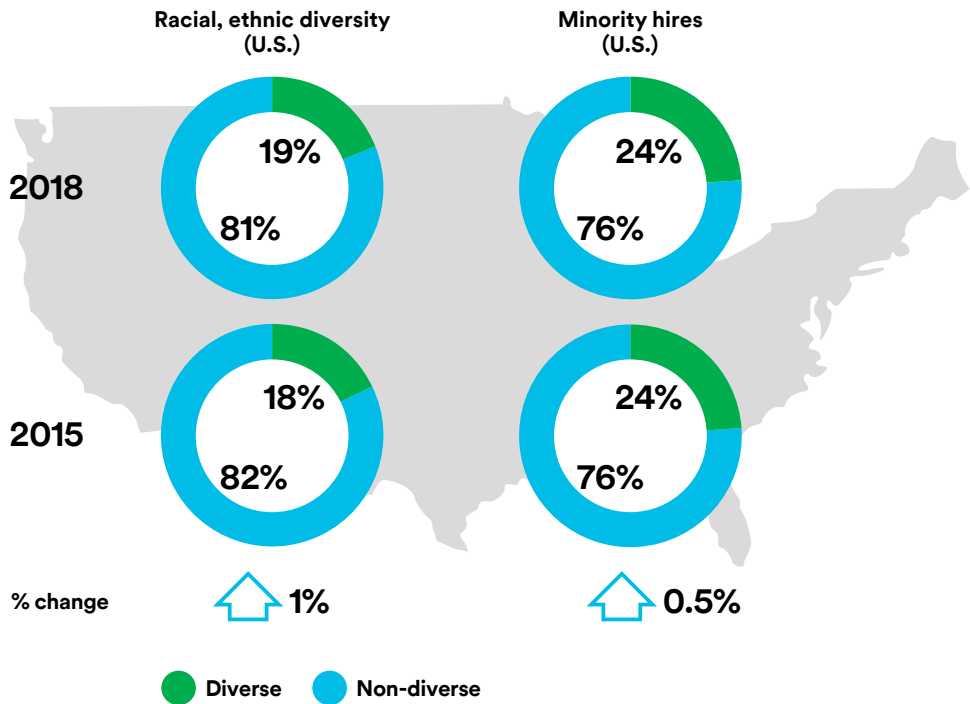
### National Industries for the Blind (NIB)

For more than 30 years, 3M has partnered with NIB, the nation’s largest resource for jobs and training for people who are blind. In 2018, 3M was awarded the highest honor from the NIB as the first corporation to receive the Irwin Award. Check out the full story [here](#).

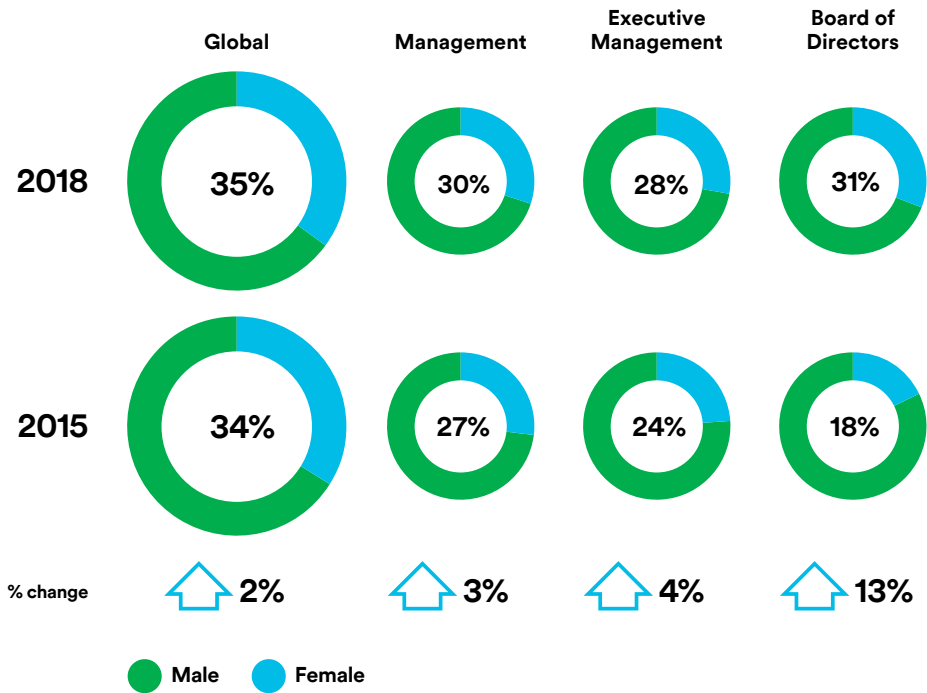
### Best Places to Work for Disability Inclusion

Representing people with disabilities is an important dimension of 3M’s Sustainability goal to double the pipeline of diverse talent in management by 2025. To that end, we earned a top score of 100 percent on the 2018 Disability Equality Index®, making us one of the “Best Places to Work for Disability Inclusion.” Participating in this index helps us identify ways we can further enhance our policies and practices around disability inclusion. It’s part of our commitment to be an inclusive culture and workplace where people of all abilities can thrive.

### Current progress and opportunity – racial, ethnic diversity



### Current progress and opportunity – percentage of global female employees



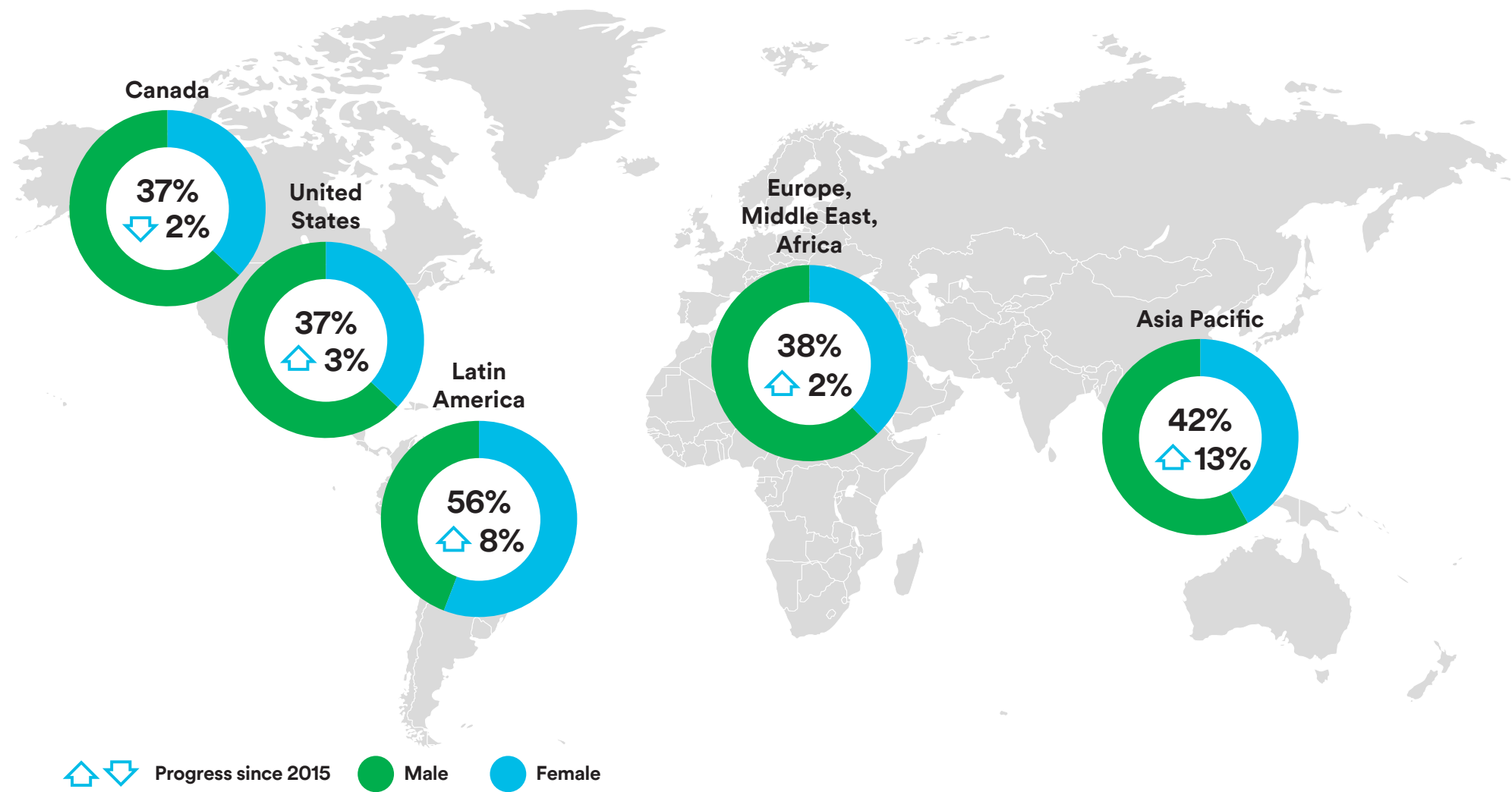
### Asia Society Awards

In June of 2018, 3M was a multiple winner in the Best Asian American Employer Awards, presented at the Asia Society Corporate Insights Summit, in New York City. These awards recognize Fortune 500 and other large companies that have demonstrated an exceptional ability to successfully attract, develop and retain Asian Pacific American (APA) leaders. 3M won two Best Employer Awards, for Best Asian Pacific American Employee Resource Groups and Best Employer for Promoting Asian Pacific Americans into Senior Leadership Positions. In addition, the company received a Best Practices Award for promoting LGBT Asian employees.

### Best Places to Work for LGBTQ Equality

For the seventh year in a row, 3M was named one of the “Best Places to Work for LGBTQ Equality” in 2018, scoring 100 percent on the Corporate Equality Index (CEI). The CEI is administered by the Human Rights Campaign and benchmarks corporate policies, including non-discrimination workplace protections, domestic partner benefits, and transgender-inclusive health care.

### Current progress and opportunity – percentage of female hires, 2018



### Looking forward

Announced on Global Inclusion Day 2018, the CEO Inclusion Council is a diverse group of 3M leaders from across the company who will focus on action planning for inclusion and diversity initiatives. With CEO Mike Roman as the champion, the CEO Inclusion Council will meet quarterly beginning in 2019.

On the same day, it was announced that each country, business, and staff group at 3M will have a designated Inclusion Champion who will lead action plans to advance inclusion initiatives within their group.

With the direction provided by these people, we will continue our journey of steady progress in increasing the pipeline of diverse talent in management in 2019. In addition, through the “Different minds inspire” campaign, we will engage employees in activities and behaviors that strengthen inclusion and create space for respecting diverse perspectives. We’ll continue to focus on integrated collaboration by combining diverse capabilities and people on teams to share knowledge and discover breakthrough outcomes.



# | Recognition

Here at 3M we strive to improve every life, act with uncompromising integrity, and ask question after question to develop innovative solutions with a purpose. We value the recognition we receive, as it shows we are a company driven by employees who are truly making a difference in the world.



The World's Most Ethical Companies® program, managed by the Ethisphere® Institute, honors companies that excel in “promoting ethical business standards and practices internally, enabling managers and employees to make good choices, and shaping future industry standards by introducing tomorrow’s best practices today.” According to the institute, honorees

have also historically outperformed other companies from a financial perspective, supporting the notion that sound ethical practices are appreciated in the competitive marketplace. This year’s honorees spanned 23 countries and 57 industries. It was the sixth consecutive year 3M made the list.

## 3M Brazil: Pró Ética Certification Award

For the fifth year, 3M Brazil was recognized by the Brazilian Government with the Pró Ética Certification Award. The award, the first of its kind in Latin America, was created to promote ethics and encourage companies to take voluntary steps to prevent corruption, creating a more ethical, transparent, and honest business environment. 3M Brazil was recognized for top management’s commitment to ethics, their policies and procedures, and their risk monitoring and analysis.



## Forbes and JUST Capital America’s Most Just Companies

Forbes and JUST Capital came out with their list of America’s Most Just Companies in 2019, and 3M moved up 26 spots from last year, to land at number 26 overall and second in the Industrial Goods sector.

To come up with the list, Forbes and JUST Capital surveyed 81,000 Americans on what they most want to see from the nation’s biggest businesses, then ranked companies with these seven priorities in mind: whether the company pays workers fairly, treats customers well and protects their privacy, produces quality products, minimizes their

environmental impact, gives back to the communities they operate in, commits to ethical and diverse leadership, and creates abundant job opportunities.



## Glassdoor’s “Best Places to Work”

As the No. 1 Minnesota-based global company, 3M ranks 60 out of 100, in the large, U.S.-based companies division, with an overall rating of 4.3 out of five.

What are other employees and candidates saying about working and interviewing at 3M? Check out [3M’s Glassdoor page](#).

## Great Places to Work®

In 2018, Great Places to Work® ranked 3M 21<sup>st</sup> among the World's Best Workplaces and 20<sup>th</sup> Best Workplaces in Manufacturing & Production. In addition, the following countries and areas were ranked and awarded as a best place to work in 2018:

- 3M Bolivia
- 3M Brazil
- 3M Costa Rica
- 3M Canada
- 3M Greece (3M Hellas)
- 3M Panama Pacifico
- 3M Poland
- 3M Central American and Caribbean Region

## Best Places to Work for LGBT Equality

Human Rights Campaign Foundation’s 2018 Corporate Equality Index is the national benchmarking tool on corporate policies and practices pertinent to lesbian, gay, bisexual, and transgender (LGBT) employees. For the seventh straight year, 3M earned a perfect score of 100 percent and, along with it, the distinction of being named among the “Best Places to Work for LGBT Equality.”

## Best DEI Places to Work

In the fourth annual Disability Equality Index® (DEI®) survey, 3M earned a top score of 100 percent, making 3M one of the “Best Places to Work for Disability Inclusion.”

## TIME Best Inventions 2018

3M was recognized by in TIME Magazine's list of Best Inventions of 2018 in the Sustainability & Social Good category for the [3M™ Smog-reducing Granules](#).

## Irwin Award

3M is the first corporation to receive the National Industries for the Blind (NIB) top national award. The award honors 3M’s longstanding commitment to creating employment opportunities for people who are blind. 3M is the second organization, and the first corporation, to receive the Irwin Award. The award is named for Dr. Robert B. Irwin, Executive Director of the American Foundation for the Blind in the 1930s and a member of the team who worked toward the formation of NIB.



**SAM**  
Sustainability Award  
Industry mover 2019

For the 19<sup>th</sup> consecutive year, 3M was selected as a member of the Dow Jones Sustainability Index, a global stock index that recognizes and tracks the performance of leading sustainability-driven companies worldwide. With our 2018 assessment, 3M was recognized as a SAM industry mover for achieving the largest proportional improvement in its Sustainability performance compared to previous year.



EcoVadis awarded 3M a Gold Recognition Level for achievements in the top one percent of suppliers assessed in corporate social responsibility (CSR) in global supply chains.



Euronext and Vigeo Eiris included 3M, for 2018, in the Euronext World 120 and Euronext U.S. 50 based upon environmental, social, and governance (ESG) performance. Index components are reviewed and updated twice a year, in June and in December. Companies included in this index have achieved the highest scores, as determined by nearly 330 indicators, assessed by the agency.



FTSE4Good

FTSE Russell confirmed that 3M, in 2018, had been independently assessed according to the FTSE4Good criteria, and had satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong ESG practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.

MSCI ESG Ratings

MSCI's ESG ratings provide institutional investors with a robust ESG integration solution. In 2018, MSCI awarded 3M the AAA rating, the highest rating.

World Business Council for Sustainable Development, Reporting Matters

In 2018, Reporting Matters, published by the World Business Council for Sustainable Development (WBCSD), recognized 3M for its good practice of providing evidence of activities through our annual Sustainability Report: "3M provides consistent evidence to demonstrate how it has addressed material issues throughout the reporting period. It uses strategic, outcome-driven case studies with historical context to help drive the narrative. Case studies tie to their #improvinglives messaging on purpose, provided at the beginning of the report, which enhances story and messaging and brings a sense of cohesion to the wide range of issues covered in the report."



ISS Environmental and Social Quality

3M earned best-in-class in risk management around environmental and social areas of concerns by Institutional Shareholder Services (ISS) with a score of "1" — or a top-performing score.

50 Best Places to Work for New Dads

Fatherly.com named 3M on its list of 50 Best Places to Work for New Dads, coming in at 45.

DIVERSEability magazine

3M was recognized in the Fall/Winter 2018 issue of DIVERSEability magazine as being "Best of the Best Top Disability-Friendly Companies."



# How We Work

Introduction	86
Corporate governance	88
Enterprise risk	96
Corporate Code of Conduct	100
Human rights	110
Compensation	120
Employee programs	124
Health and safety	136
Environmental management	142
Raw materials	148
Water	154
Climate and energy	160
Suppliers	176

# Sustainable thinking is embedded firmly at the core of 3M.

## R&D at 3M is a little different: We separate the R and the D.

Just as Sustainability is embedded throughout our Value Model, sustainable thinking is embedded firmly at the core of 3M and in the strategic planning process we use for every region, every market, and every business.

In each of our business groups and regions we have dedicated Sustainability leaders who develop a relevant and well-informed strategy specific to their market demands and business goals.

Annually, like many companies, we go through a strategic planning process during which our divisions and regions develop their business strategies for the next few years. However, unlike others, we formally require that each plan address Sustainability factors relevant to their market needs and business opportunities.

First, the "R". Scientists in our central laboratory are free to focus on pure research, in search of unscripted, unexpected opportunities for breakthroughs. Our unique "15% Culture" gives

them the freedom to follow their instincts. At the same time, our Tech Forum is a key enabler of collaboration. This self-directed, self-organized group unites 10,000-plus scientists and engineers who work together to solve problems across oceans and continents, regardless of which business they're from.

For the "D", 3M development teams within each of our business groups draw upon our core technologies to create products for targeted markets and geographies.

Moving forward, we will continue to expand beyond our own operations and focus more on 3M Sustainability goals and the needs of our customers and communities. While we recognize the importance of what we do in our own businesses, and will continue to innovate there, we see that far greater impact can be realized when we partner to understand and overcome the challenges we face together.



# Corporate governance

3M believes that good corporate governance practices serve the long-term interests of stockholders, strengthen the Board and management, and further enhance the public trust 3M has earned from more than a century of operating with uncompromising integrity and doing business the right way.

## Our commitment

Our corporate governance principles govern how we do business daily, enabling us to outperform and lead the way to sustainable growth. They provide a framework that defines the roles, rights, and responsibilities of different groups within the organization, the Board’s role in risk oversight, public policy engagement, and 3M’s commitment to the environment and society.

3M’s [Board of Directors](#) oversees the CEO and senior management and assures that appropriate procedures and controls are in place covering managements’ activities in operating the company on ethical grounds on a day-to-day basis.

3M’s Board of Directors has adopted [Corporate Governance Guidelines](#) which provide a framework for the effective

governance of the company. The guidelines address matters such as the respective roles and responsibilities of the Board including leadership structure, responsibilities of the independent Lead Director, director independence, membership criteria, committees, and management evaluation. The Board’s Nominating and Governance Committee is responsible for overseeing and reviewing the guidelines, at least annually, and recommending proposed changes to the Board for approval. The Corporate Governance Guidelines, [Certificate of Incorporation and Bylaws](#), charters of the Board committees, [Director Independence Guidelines](#), and [Board of Directors Code of Conduct](#) provide the framework for the governance of the company and are available on our website at [www.3M.com](#), under Investor Relations — [Governance](#)

The Board’s current leadership structure is characterized by:

- A combined Chairman of the Board and CEO
- A strong, independent, and highly experienced Lead Director with well-defined responsibilities that support the Board’s oversight responsibilities
- A robust committee structure consisting entirely of independent directors with oversight of various types of risks
- An engaged and independent Board

The Board of Directors believes that this leadership structure provides independent Board leadership and engagement while deriving the benefits of having our CEO also serve as Chairman of the Board. As the individual with primary responsibility for managing 3M’s day-to-day operations and with in-depth knowledge and understanding of the company, CEO is best positioned to chair regular Board meetings as the directors discuss key business and strategic issues. Coupled with an independent Lead Director, this combined structure provides independent oversight while avoiding unnecessary

confusion regarding the Board’s oversight responsibilities and the day-to-day management of business operations.

The Board plans the succession to the position of Chairman/CEO and other senior management positions. To assist the Board, the Chairman/CEO and senior vice president of human resources annually assess senior managers and their succession potential for the position of Chairman/CEO and other senior management positions. As a result of a thorough and thoughtful succession planning process, on March 5, 2018, the Board appointed Michael F. Roman CEO, effective July 1, 2018, succeeding Inge G. Thulin.

## Board’s role in the company’s long-term strategy

Each year management presents to the Board, and the Board discusses and approves, detailed long-term strategic plans for the company. In addition to the overall strategic plan for 3M and the business groups, the discussions also focused on breakout sessions with the directors on strategic corporate-wide themes of portfolio management,

innovation, commercial transformation, manufacturing and supply chain transformation, and people and culture.

Our long-term strategy is outlined in the 3M Value Model. The 3M Value Model is what differentiates our company in the marketplace. It’s how we create extraordinary value for customers, and premium returns for shareholders. The model is built around four elements: our Vision, our strengths, our priorities, and our Values. Additional details can be found earlier in this report under [3M Value Model](#).

## Lobbying and Political Activities Principle

As a concerned member of our communities, 3M actively participates in public policy and legislative advocacy, or “lobbying.” As appropriate, 3M also participates in political activities to elect and work with elected representatives and government officials. 3M’s Government Affairs organization coordinates and oversees 3M’s lobbying and political activities. 3M Political Activities Board, which is made up of senior 3M executives, oversees 3M’s political contributions and the activities of

3M’s Political Action Committee (3M PAC). 3M PAC is a nonpartisan fund comprised of voluntary employee and stockholder contributions that is used to make contributions to U.S. federal, state, and local candidates as permitted by law. These activities must always comply both with applicable laws and [3M’s Lobbying and Political Activities Principle](#).

# Our actions

## Board membership criteria

3M’s Corporate Governance Guidelines contain Board Membership Criteria which include a list of key skills and characteristics deemed critical to serve 3M’s long-term business strategy and expected to be represented on 3M’s Board. The Nominating and Governance Committee periodically reviews with the Board the appropriate skills and characteristics required of Board members given the current Board composition. It is the intent of the Board that the Board, itself, will be a high-performance organization creating competitive advantage for the company. To perform as such, the Board will be composed of

individuals who have distinguished records of leadership and success in their arena of activity and who will make substantial contributions to Board operations and effectively represent the interests of all stockholders. The committee’s and the Board’s assessment of Board candidates includes, but is not limited to, consideration of:

- Roles in and contributions valuable to the business community
- Personal qualities of leadership, character, judgment, and whether the candidate possesses and maintains throughout service on the Board a reputation in the community at large of integrity, trust, respect, competence, and adherence to the highest ethical standards
- Relevant knowledge and diversity of background and experience in business, manufacturing, technology, finance and accounting, marketing, international business, government, and other areas; and
- Whether the candidate is free of conflicts and has the time required for preparation, participation, and attendance at all meetings

In addition to these minimum requirements, the committee will

also evaluate whether the nominee’s skills are complementary to the existing Board members’ skills, the Board’s needs for particular expertise in certain areas, and will assess the nominee’s impact on Board dynamics, effectiveness, and diversity of experience and perspectives.

## Board refreshment

We regularly add directors to infuse new ideas and fresh perspectives into the boardroom. In the past five years, six new independent directors have joined our Board. In recruiting directors, we focus on how the experience and skill set of each individual complement those of their fellow directors to create a balanced board with diverse viewpoints and backgrounds, deep expertise, and strong leadership experience.

At the 2019 Annual Meeting, two nominees will be standing for election to the board for the first time. Dr. Dambisa Moyo, who joined the Board in August 2018, holds a doctorate in economics from the University of Oxford and has expertise in examining the interplay of international business and the global economy. Her background includes advising

companies in their investment decisions, capital allocation, and risk management. Prior to founding Mildstorm LLC, she worked at Goldman Sachs in various roles, including as an economist, and at the World Bank in Washington, D.C. The combination of her banking and financial services industry experience along with her extensive knowledge of macroeconomics, geopolitics, and global markets brings valuable insight to the 3M Board. A new nominee, Pamela J. Craig, is the retired Chief Financial Officer of Accenture plc, a global management consulting, technology services, and outsourcing company. She served as Accenture’s CFO from 2006 through 2013, following her many other leadership roles at Accenture during her 34 years with the company. Her experience as CFO at a global Fortune 500 company, and her skills in financial, audit, risk management, and governance matters, adds valuable expertise to the 3M Board.

## Stockholder engagement

We maintain a vigorous stockholder engagement program. During 2018, members of senior management met with a cross-section of stockholders owning approximately

36 percent of our outstanding shares, or approximately 55 percent of our institutional stockholders. The meetings included an overview of 3M and a discussion of practices on corporate governance, including Board refreshment and diversity, director evaluation, directors’ skills matrix, Sustainability, succession planning, and Board leadership structure. The feedback from these meetings was shared with the Board of Directors and helped inform the Board on corporate governance practices and trends. Although stockholder engagement is primarily a function of management, our lead independent director and executive chairman attended some of these meetings.

## Director independence

The Corporate Governance Guidelines and Director Independence Guidelines provide that independent directors must comprise a substantial majority of the 3M Board. A director is “independent” if the Board affirmatively determines that the director has no material relationship with 3M directly or as a partner, shareholder, or officer of an organization that has a relationship with the

company and otherwise meets the requirements for independence of the listing standards of the New York Stock Exchange. The independent directors will make the Board decisions on corporate governance matters.

The Guidelines specify the criteria by which the independence of our directors will be determined, including strict guidelines for directors and their immediate family members with respect to past employment or affiliation with 3M or its independent registered public accounting firm. The Guidelines also prohibit Audit and Compensation Committee members from having any direct or indirect financial relationship with the company, and restrict both commercial and not-for-profit relationships of all directors with 3M. Directors may not be given personal loans or extensions of credit by the company, and all directors are required to deal at arm’s length with 3M and its subsidiaries, and to disclose any circumstance that might be perceived as a conflict of interest.

## Diversity

For 3M, diversity, in its myriad manifestations, is fundamental to innovation, performance, and relevancy. 3M employees reflect that diversity. The Board of Directors regards diversity as an important factor in selecting Board nominees to serve on the Board. Although the Board has no specific diversity policy, when selecting nominees, it actively considers diversity in recruitment and nomination of directors, such as gender, race, and national origin. The current composition of our Board reflects those efforts and the importance of diversity to the Board.

An inclusive culture at 3M is built on our [Be Respectful Principles](#) — to respect the dignity and worth of individuals; encourage the initiative of each employee; challenge individual capabilities; and provide equal opportunity. 3M is continuously focusing on building and maintaining an inclusive culture. Additional information on our inclusive culture can be found in the [diversity and inclusion section](#).

## Governance actions

Our committees are designed to assure the execution of 3M’s vision for the future. The Board currently has 13 directors and the following four committees following their charter: [Audit](#), [Compensation](#), [Finance](#), and [Nominating and Governance](#).

During 2018, the Board of Directors held eight meetings. Overall attendance at Board and committee meetings was 97 percent.

## Commitment to economic, environmental, and social topics

At 3M, we are purpose-driven enterprise. We know that we can grow our business, while collaborating to solve some of humanity’s greatest challenges.

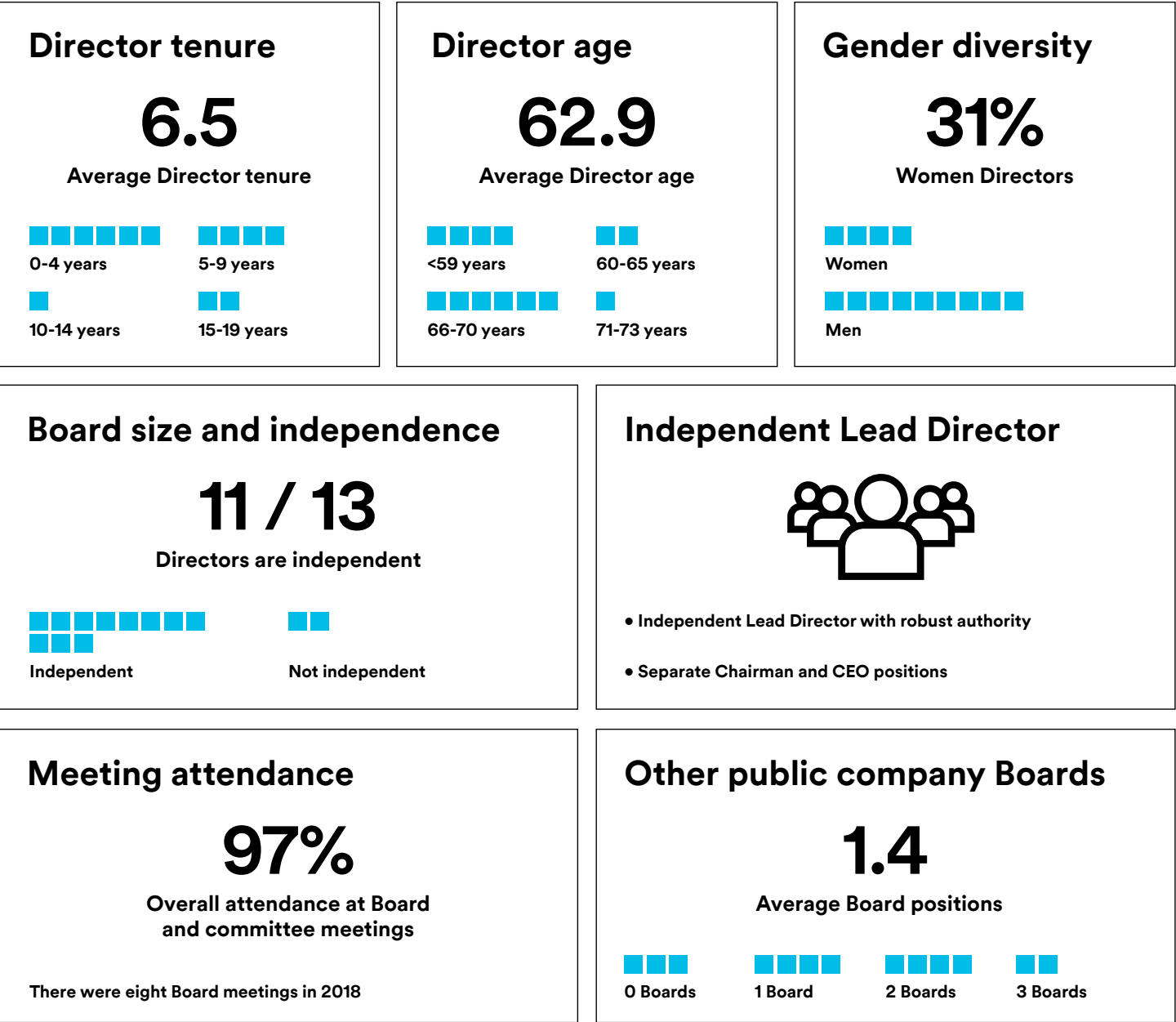
We apply our expertise and technology to solve problems collaboratively, and with a focus on long-term, sustainable solutions that demonstrate our commitment and societal purpose. Sustainability is fundamental to our business — from Sustainability-inspired innovation, product stewardship,

and in our operations. And we know that innovation isn’t innovation, without Sustainability. As we seek to improve every life, we see partnerships to help our customers and communities achieve their Sustainability goals as key to that ambition.

Our corporate Vision states: “3M technology advancing every company... 3M products enhancing every home... and 3M innovation improving every life.” It is that vision — carried out in collaboration with our customers, communities, and partners — that guides our Sustainability strategies, goals, and aspirations.

Sustainability is a topic at all levels of our company. On an annual basis, our Chief Technology Officer and our Chief Sustainability Officer report directly to the Board’s Nominating and Governance Committee on our Sustainability efforts. The Science, Technology, and Sustainability (STS) Committee, our executive committee, provides leadership, oversight, and strategy to encourage and assure Sustainability opportunities and innovations are supported and recognized at the highest level of the company, and with strong policies, and procedures, in place.

## 3M Board of Directors





In 2018, STS members included our Executive Chairman of the Board, Chief Executive Officer, Senior Vice President and Chief Financial Officer, and Senior Vice President Research and Development and Chief Technology Officer. Throughout 2018 this executive committee met with increasing frequency as we created our new business strategy, known as our Strategic Sustainability Framework. This senior leadership team was highly engaged and involved in its development and remains increasingly engaged in the resulting innovations and actions. To assure Sustainability is embedded across our enterprise, a global Sustainability leadership team meets monthly to discuss shared opportunities, best practices and new ideas. This team includes senior representation from all of our business groups as well as 3M’s regions worldwide, and members of key functions contributing to our Sustainability strategy and plan.

3M’s Code of Conduct

More than a century of operating with uncompromising integrity has earned 3M trust from our customers, credibility with our communities, and dedication from our employees. And for the sixth year in a row, 3M has been recognized by Ethisphere® as one of the World’s Most Ethical Companies®.

The Code of Business Conduct and Ethics for Directors of the Company incorporates long-standing principles of conduct 3M and the Board follow to assure the company’s business and the activities of the Board are conducted with integrity and adherence to the highest ethical standards, and in compliance with the law.

Our Code of Conduct applies to all employees, including our CEO, Chief Financial Officer, and Chief Accounting Officer. See our [Code of Conduct section](#) for additional details.

Lobbying and Political Activities Principle

All 3M political action committee (PAC) receipts, disbursements, and contributions are publicly disclosed as required by law. 3M’s reports are available on the Federal Election Commission website. Corporate contributions directly to candidates, political committees, ballot measures, Section 527 organizations, and issue advocacy or “lobbying” are outlined in our Political Activities and Issue Advocacy [report](#).

In 2018, 3M’s top priority public issues were:

- Tax reform implementation and conformity
- Automobile electrification and connected vehicles
- Chemical regulation
- Health care policy
- International trade policy, agreements, and enforcement
- Regulatory reform

- Economic development incentives and workforce development
- Military readiness and modernization
- Personal and worker safety policy
- Sustainable solutions and environmental policy

Detailed information on each priority, can be found in our [2018 U.S. “Top-10” Priority Public Policy Issues statement](#).

Governance Links

For more information on corporate governance at 3M, see:

- [Corporate Officers](#)
- [Board of Directors](#)
- [Committee Composition](#)
- [Governance Documents](#)
- [Annual Reports and Proxy Statements](#)

Looking forward

We regularly post governance news, events, and presentation information in the Investor Relations section of our website. See [3M events and presentations](#)

# Enterprise risk

## We continually evaluate our approach to potential risks facing the company.

### Our commitment

The concept of risk appetite and tolerance is an essential component of our strategic planning, and it's the responsibility of our senior business leaders to plan accordingly.

It is our firm belief that good corporate governance practices serve the long-term interests of stockholders, strengthen 3M's Board of Directors and management, and further enhance the public trust 3M has earned from more than a century of operating with uncompromising integrity and doing business the right way. Governance includes broad risk oversight by the Board and its committees. Risk analysis is reported to the full Board, the General Auditor, and Chief Compliance Officer. Both the General Auditor and Chief Compliance Officer are

appointed by, and report to, the Audit Committee of the Board.

#### Risk oversight

The Board has delegated primary responsibility for the oversight of risks facing the company to the Audit Committee. The [3M Company Board of Directors Audit Committee Charter](#) states that the committee will "discuss policies and procedures with respect to risk assessment and risk management, the company's major risk exposures, and the steps management has taken to monitor and mitigate such exposures."

The Vice President and General Auditor, Corporate Auditing, whose appointment and performance is reviewed and evaluated by the Audit Committee, is responsible for leading the formal risk assessment and management process within the company. The General Auditor, consulting with the company's senior management, annually

assesses the major risks facing the company and works with those executives responsible for managing each specific risk. The General Auditor periodically reviews with the Audit Committee the major risks facing the company and the steps management has taken to monitor and mitigate those risks.

While the Board's oversight of risk is primarily performed by the Audit Committee, the Board has also delegated to other [committees](#) the oversight of risks within their areas of responsibility and expertise.

We believe this governance of risks by Board committees, who share information with the full Board, is appropriate for a diversified technology and manufacturing company like 3M. [3M's 10-K, Item 1A](#), outlines risk factors applicable to the company.

### Our actions

#### Corporate-level

3M's Enterprise Risk Management (ERM) initiative, launched in 2001, has helped assure adequate recognition and ownership of the most significant potential risks to the company's shareholder value, using a process that proactively identifies and communicates enterprise risks within the company. This includes confirming that appropriate plans and oversight exist for all major risks, providing for ongoing review and assessment of risk, and aiding in generating awareness and engagement of general risk matters throughout the company. The approach provides a customized capability that leverages 3M's comprehensive, experience-based global knowledge and capabilities rather than tools often used in financial or insurance-oriented businesses.

To assure long-term success, we are committed to discovering and preparing for all potential threats to our [Vision](#). Risk owners familiar with the environmental, economic, and business aspects within the company are interviewed and requested to complete a

thorough assessment for their respective risk(s). Together, with subject-matter experts and senior management, the outcomes are mapped to demonstrate the relative level of risk and likelihood of risk. This "heat map" identifies the highest-risk areas to focus internal efforts on. In addition, external resources and data are continually reviewed to assist in the risk identification process. The results of our various risk assessment exercises are shared with the Corporate Operations Committee and the company's full Board of Directors.

3M places particular emphasis on protecting our company against emerging risks in an ever-changing world. Case in point: cybersecurity. Strong cybersecurity programs are essential, and we continue to invest in information technology systems and activities around cybersecurity training and awareness, especially when it comes to avoiding phishing and other threats targeting 3M.

#### Board members and general auditor meet 1:1

In 2018, the Vice President, General Auditor met with each independent

3M Board member to discuss risk management in general as well as specific risk-related topics facing the company. These meetings gave Board members an opportunity to share what risk issues were top-of-mind for them, and which should be reviewed and addressed by the Board. For most Board members, the most critical risk in 2018 and into the future was cybersecurity.

#### Business-level

In 2018, 3M served customers through five business groups. Annually, leadership from each business group presents to the Board, and the Board discusses and approves, detailed long-term strategic plans for the company, both at the area and business group level. Each presentation includes the following: an overview of the business group, short- and long-term financial performance and goals, an assessment of portfolio growth opportunities, strategic priorities to drive our Value Model.

#### Facility-level

Our Environmental, Health, and Safety (EHS) management system looks carefully at each 3M site and new acquisition and performs a crisis risk analysis that



considers factors such as potential impact to the environment, the community, and 3M employees. Each site is ultimately ranked based on the risk it poses to the company, and necessary steps are taken to minimize potential risks. Acquisitions are of particular focus as we bring each new sight under 3M’s protocol with the proper training.

In addition to conducting environmental, health, and safety risk analysis, we created a crisis plan for every single 3M plant in the world. Although we hope to never use the Crisis Management Planning Guidelines, it’s critically important that we have them in place, keep them up to date, and drill employees often to make sure everyone understands what to do should an emergency occur. We care about the safety of our people and communities around the world.

The Crisis Management Planning Guidelines are designed to provide a common framework for integrating crisis management into the standard operations of each 3M facility. All plans must be prepared in accordance with good engineering practices and with the full approval of management. Also, to evaluate the effectiveness of the plans, scenario exercises are conducted periodically at facilities.



# Looking forward

3M will continue deploying a single enterprise resource planning (ERP) system worldwide to provide a consistent, comprehensive, and discrete information platform for our businesses everywhere. It’s another example of our commitment to continual growth and adaptation to emerging risks in an ever-changing world.



# Corporate Code of Conduct

For 3M people, there is only one ethical road to travel. The high road.

## Our commitment

The Code of Conduct is part of 3M’s Value Model and positions 3M for long-term growth. Our values bind us together as 3M employees — across business groups and across geographies.

Great companies are built on trust — trust from customers, shareholders, employees, and communities. We’ve earned that trust and our reputation for integrity over many decades, and no one at 3M is free to compromise it.

To make it as simple as possible, we have one [Code of Conduct](#) that

applies to our 92,000 employees in over 70 countries globally. Our Code of Conduct summarizes 3M’s compliance principles and raises awareness for doing business the right way, always and everywhere. The Code is our guide for answering questions and providing direction when the right choice may not be clear.

3M’s Code of Conduct defines how we work:

- Be Good
- Be Honest
- Be Fair
- Be Loyal
- Be Accurate
- Be Respectful

3M employees, including all supervisors, managers, and other leaders, are responsible for knowing and following the ethical, legal, and policy requirements that apply to their jobs and for reporting any suspected violations of law or the Code. Executives and managers are accountable for creating an inclusive workplace environment that encourages asking questions and raising concerns.

The Code is available in 25 languages and sets clear expectations not only for employees, but also for relevant stakeholders and business partners. All new employees receive a copy of the Code.



## Business Conduct Committee

The 3M Business Conduct Committee is composed of several senior executives and is chaired by 3M’s Chief Compliance Officer. This committee oversees 3M’s compliance efforts to assure that 3M has an effective and world-class compliance program that is agile and anticipates changes in the external landscape and internal business strategy. The Business Conduct Committee, as appropriate, updates the [Audit Committee](#) of the 3M Board of Directors and Corporate Operating Committee. Additionally, similar committees exist at country or regional levels to operationalize and prioritize compliance activities.

## Global compliance program

3M’s global compliance program is managed and administered by the Compliance and Business Conduct Department, led by the Chief Compliance Officer and Vice President of Compliance and Business Conduct. The department is staffed with compliance professionals stationed around the world. The Chief Compliance Officer reports directly to the Audit Committee of the 3M Board of Directors. The Audit Committee assists the Board in oversight of 3M’s legal and regulatory compliance efforts. This direct reporting line assures the independence of the Compliance and Business Conduct Department, which is responsible for overseeing and administering strategic, systemic, and operational components of 3M’s compliance program.

The compliance program is designed to meet the U.S. Federal Sentencing Guidelines and, as designed, meets similar global standards and requirements of other countries’ anti-bribery laws.

The program consists of:

- A core set of business conduct principles
- Education and training
- Periodic evaluations, audits, and procedures to measure and assess the compliance program’s effectiveness
- A 24-hour global helpline and website through which all employees and others can report concerns and ask questions anonymously, in most countries
- Risk-based due diligence on business partners, potential acquisitions, and candidates for hiring and promoting
- Investigation expertise
- Incentives and discipline to address compliance successes and failures

## Compliance training and education

3M offers a comprehensive online compliance training program to all employees worldwide.

The program’s training modules are assigned to employees based on their role and area of responsibility

within the company. Most courses are mandatory for approximately 46,000 global employees. An annual training plan is established each year based on an assessment of internal and external factors to prioritize topics and timing of deployment. Online courses are offered in 22 languages. Examples of recent training modules include:

- Data Privacy and Protection: The Real World
- Security and Protection
- Gifts, Entertainment, and Travel
- Avoiding Bribery and Corruption: A Global Overview
- Understanding Global Competition
- Creating a Harassment-Free Workplace
- Code of Conduct and Ethical Decision Making
- Recognizing Conflict of Interest

The Compliance and Business Conduct website on 3M’s intranet offers additional on-demand online training courses. In addition to offering online training, the Compliance and Business

Conduct Department — in close collaboration with 3M Legal Affairs, local compliance contacts, finance, and human resources — provides frequent, tailored in-person training to businesses, subsidiaries, staff groups, and third parties. Some of this training occurs as part of an annual schedule, and other training occurs as requested or deemed appropriate.

Reporting concerns

Upholding 3M’s Code of Conduct and values is the responsibility of everyone acting on 3M’s behalf. We encourage our employees to ask questions or report concerns to management, 3M’s Compliance and Business Conduct Department, 3M Legal Counsel, [3MEthics.com](#), their assigned human resource manager, 3M Corporate Audit Department, or the Audit Committee of the Board of Directors. Our strong ethical culture requires and empowers employees to make the right choices every day. 3M makes it clear that speaking up is the right thing to do. We know our employees care about the company and want to do the right thing.

In addition, 3MEthics.com is a 24-hour confidential and anonymous (where permitted by local law)

helpline and online reporting system. It is managed by a third-party vendor and is available to 3M employees and others externally. The system does not trace phone calls or use caller identification, nor does it generate or maintain internal connection logs containing internet protocol (IP) addresses. Web-based reports are made through a secure internet portal, which does not trace or show user screen names.

The Compliance and Business Conduct Department has the responsibility to review every business conduct concern that is reported. After review, the department determines which reports require an investigation. If an investigation is needed, an appropriate investigation resource is assigned to the matter. For concerns that are substantiated, disciplinary actions may be taken. Discipline comes in a range of forms consistent with similar past violations, from warnings, to suspensions, to termination. Disciplinary actions may impact one or more persons associated with a single substantiated violation. The "Global allegations and disciplinary action graph" illustrates business conduct related reports raised in 2018, using our reporting tools found at 3MEthics.com.

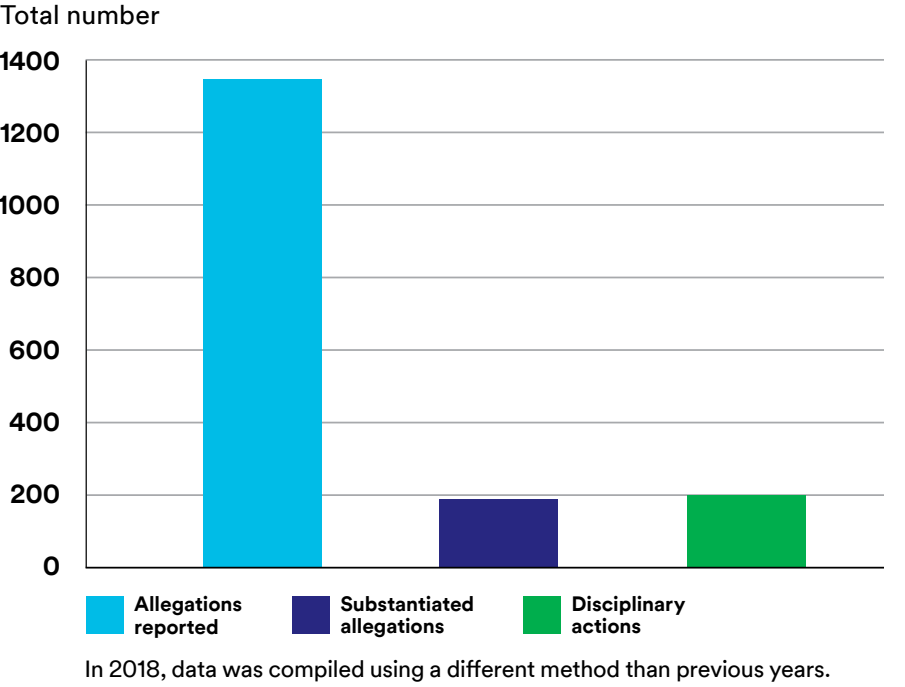
In 2018, we initiated a project to incorporate metrics from a broader range of 3M functions that conduct investigations and track employee concerns. This provides a more complete view of the frequency and type of concerns reported globally and better reflects the “speak-up” culture that exists within 3M. This data is used to prioritize resources and focus strategies.

“Speak up” poster

3M encourages all employees to “Speak up” to raise a concern or suspected violation of the Code. In 2018, we created a poster that encompasses many of our most frequently used languages and encourages our speak-up culture.



3M global allegations and disciplinary actions



3M’s non-retaliation process

3M prohibits retaliation against anyone who raises a business conduct concern or cooperates in a company investigation. To monitor this risk, a compliance investigator contacts the reporter several months after an investigation closes to discuss if the person has experienced any form of retaliation. This is done either by phone or via email for non-anonymous reporters.

For anonymous reporters who used 3MEthics to raise a concern, the follow-up is handled through 3MEthics to maintain anonymity. If claims of retaliation are identified, the investigation team will follow up on them. All concerns raised are expected to be made in good faith. 3M has a strong position against retaliation, which is reflected in the Non-Retaliation Policy and within 3M’s Employee Obligations and Reporting Principle.



Assessments

A dedicated team within 3M’s Compliance and Business Conduct Department conducts periodic compliance and anti-bribery evaluations in various 3M subsidiaries and operating units each year. These evaluations are selected using objective and subjective risk factors, and include reviews of financial transactions, compliance records, interviews with business personnel, and audits of selected third-party intermediaries. In 2018, we interviewed approximately 900 non-production employees as part of the evaluation process. Additionally, the number of third parties reviewed or visited through an evaluation grew substantially. This growth was enabled by an enhancement introduced in 2017 called a local evaluation, which uses the same methodology of the existing evaluation program but has a more focused scope. A number of local evaluations in 2018 specifically focused on third-party business partners.

Not only do audits, evaluations, and risk assessments help detect opportunities for improvement and gaps in processes or procedures, they also reinforce

the importance of operating in an ethical, compliant manner.

Commitment to anti-corruption

As a member of the United Nations Global Compact (UNGC), 3M is committed to support Principle 10 on Anti-Corruption. Our commitment and involvement with the UNGC, and with our community of peer companies, provides us with the opportunity to collaborate and share best practices related to work against corruption in all its forms. Additionally, the compliance professionals on our team regularly participate, present, and are members of organizations and associations working to improve compliance controls and reduce legal risk.

3M’s Code requires compliance with all applicable anti-bribery laws, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, Brazil’s Clean Company Act, and local laws where 3M operates. It applies to 3M employees, as well as to our business partners. In addition, 3M’s Anti-Bribery Principle and anti-corruption policies and procedures have been communicated to all employees. Our “Avoiding

Bribery and Corruption: A Global Overview” training is required of most non-production employees and specifically employees in higher-risk roles, including those in legal, audit, sales, marketing, export, and global trading. The Chief Compliance Officer provides quarterly updates on all activities to the Audit Committee of the Board of Directors and the 3M Business Conduct Committee.

3M’s commitment to anti-corruption is also reflected in our management of third-party intermediaries and other business partners. 3M conducts due-diligence reviews of our third parties based on an assessment of risk factors, including transaction size, type of relationship, government interactions, and geography. Depending on the outcome of the review, we respond to any identified risks with specific actions, such as training, inclusion of relevant contractual terms, and other risk-mitigating controls. 3M may end a relationship with a business partner if the risk presented is determined to be too high and cannot be appropriately mitigated.

Further, the Compliance and Business Conduct Department collaborates with 3M Legal Affairs

on due-diligence processes related to potential venture investments and mergers and acquisitions. These processes help identify risks in the target company before an acquisition or investment is initiated. This process accelerates our efforts to integrate an acquired company’s employees to 3M’s compliance program and culture. Ultimately, the Compliance and Business Conduct Department is charged with conducting a risk review and implementing any necessary remediation activities upon the closing of every acquisition. In 2018, as part of our compliance integration process, we completed a follow-up compliance culture survey that was initially piloted with an acquisition in 2017. These surveys help identify whether new employees understand 3M’s compliance expectations and where further assistance or training can be provided.

Finally, the Compliance and Business Conduct Department has a group of specialists focused on assuring that 3M conducts government contract and subcontractor business in compliance with all laws. This group trains, assists, and coaches 3M employees on all government contracting needs,

including providing guidance and advice on identifying, managing, and mitigating risk.

Political values

3M respects our employees’ right to engage in the political process, and, at the same time, 3M is committed to prevent potential corruption. When allowed by law, any corporate political contributions outside of the United States require approval by the Area Vice President and assigned legal counsel.

For additional information on our Code of Conduct, please visit [https://www.3m.com/3M/en\\_US/company-us/about-3m/compliance-business-conduct/](https://www.3m.com/3M/en_US/company-us/about-3m/compliance-business-conduct/).

Third-party brochure

To enhance our communications and expectations with third parties, 3M has an online training course and has created a brochure for our business partners. The online training course covers anti-bribery and is available in 22 languages. The brochure, available in 27 languages, provides another way for 3M to communicate with our business partners regarding our commitment to combat global bribery.

“At 3M, we pride ourselves with our long-standing commitment to doing the right thing. By Living our Code of Conduct, it allows us the opportunity to advance every company, enhance every home, and improve every life.”

— Veena Lakkundi  
3M Chief Compliance Officer and Vice President Compliance and Business Conduct

# Our actions

## Code of Conduct

We recently launched a refreshed version of our [Code of Conduct](#), Be 3M, which is available in 25 languages. We leveraged feedback from global stakeholders and employee focus groups to identify opportunities to make the Code more contemporary. We improved readability and added new sections: social media, Sustainability, speaking for the company, and volunteering and charitable giving. To create more interest, we added interactive learning aids, additional graphics, and imagery. We maintained our Code’s organization around the six “Be” mandates, which are universally understood (Be Good, Be Honest, Be Fair, Be Loyal, Be Accurate, and Be Respectful).

## Global Ethics and Compliance Day

All over the world, we held Ethics and Compliance Day events to further build employee engagement about the Code and doing the right thing. For the second year in a row, we held a compliance day in the U.S. Featured speakers included Mike Roman, Chief Executive Officer; Veena Lakkundi, Chief Compliance Officer and Vice President Compliance and Business Conduct; and Ivan Fong, Senior Vice President and General Counsel of 3M. In addition, we held a panel of business leaders who discussed ethical challenges, and we hosted a customer who spoke about the value of working with an ethical and compliant company. The theme of the U.S. compliance day was myth-busters. 3M scientists showcased experiments and explained scientific myths, while experts from various compliance functions in the company (including Corporate Audit, Global Security, Government Contract Compliance, Treasury, Finance, Investigation Teams, EHS, IT Quality and Compliance, Regulatory Trade, and U.S. Compliance Contacts) were stationed at booths where they held interactive discussions

with employees about their area of expertise, answered their questions, and addressed some common myths about their areas. Games and videos were created to bring the Code to life in a fun, interactive way.



## Living the Code award

This year, we promoted our Living the Code recognition program more broadly and widened the audience from which we accept nominations. Previously, nominations were raised through the Compliance and Business Conduct Department and our network of compliance contacts in our countries and businesses. Also, this year, we opened the nomination process to all employees and launched a communication campaign to energize employees about the program. To assure timely receipt and processing of nominations, we created a supporting infrastructure

and new processes to guide the program and provide clarity on the type of conduct we recognize. This program is important to 3M, because it is the way we recognize employees who go above and beyond to do the right thing.

## Case studies and metrics

To provide greater transparency on the challenges our employees sometimes face, the Compliance and Business Conduct Department publishes and distributes case studies quarterly to all employees, highlighting real-life ethical dilemmas. The quarterly series of case studies not only includes missteps but also includes positive stories of individuals who made the right choice and received our Living the Code recognition.

Without revealing personal information, we include with each case study details on outcome and any disciplinary action the company took. Employees appreciate this level of transparency and find the relatable examples useful for their learning. Finally, the quarterly series of case studies includes metrics and infographics that highlight activity from our

hotline and resulting disciplinary action taken for cases, which we substantiate and close each quarter.

## Supervisor toolkit

Because most ethical challenges are raised to a person’s manager or supervisor, we created a series of tools and reference material for supervisors to help address employee questions and respond appropriately when dealing with potential violations of the law or the Code of Conduct. The tools include a simple guide and badge holder that describes the type of matters that should be immediately escalated to a subject-matter expert to handle and resolve. Additionally, we created a handbook to educate supervisors on the proper way to manage an employee concern. This handbook explains the investigation process, so supervisors have visibility into how 3M manages investigations. Finally, we created an animated video that illustrates examples of good and poor practices when dealing with employee concerns or questions.

## Senior leadership training

Leadership is critical to creating a culture of trust, ethics, and compliance. To help build upon our already strong leadership foundation, we launched training sessions for all Country Business Leaders and their Management Operating Committee members. Over 500 leaders went through individual one-on-one sessions with subject-matter experts in compliance or legal. The discussions were interactive and covered topics from all areas of ethics and compliance, including respectful workplace, third-party due diligence, and the investigation process, to name a few.



## Looking forward

We continue to focus on building and maintaining our culture of ethics, encouraging speak-up, and enhancing our controls.

Building on our foundation of executive messaging, we will turn our focus on messaging to middle management. Middle management influences day-to-day operations, and these individuals are typically the first people employees consult regarding ethical concerns. In 2019, we will launch quarterly communications to supervisors, providing information that will enable them to set the right tone and candidly discuss ethical issues with their team.

While supervisors play an important role in managing employee concerns, protecting 3M's reputation is the responsibility of all employees. To reinforce this message, we will continue to hold ethics and compliance days around the world. We will also test new communication tools to increase employee engagement and awareness of compliance. We will develop and release a unique "Moment of Truth" video series that will feature 3M employees telling their stories of ethical dilemmas.

We will enhance our existing Local Compliance Contact Network to expand our reach, reduce gaps, and improve our overall culture of compliance. We will standardize the role globally and provide clarity on the responsibilities of a contact. Further, we will identify the attributes of an ideal candidate for this position and the value the role brings to a contact's career development at 3M.

Finally, we will expand our data analysis by leveraging data from sources outside of Compliance and Business Conduct, including Finance, Customer Relationships, and other systems. We will analyze this data to be more predictive in the manner we assess risk, identify trends, and prioritize activity. We will also seek to simplify and automate compliance processes by integrating them into new systems and workflow tools at 3M.



# Human Rights

## Doing business the right way. At all times. Under all circumstances.

### Our commitment

Our [Human Rights Policy](#) applies to all 3M employees, contingent workers, anyone doing business with or on our behalf, candidates for hire at 3M, and others acting on 3M's behalf.

In 2014, we became a participant of the United Nations Global Compact (UNGC), thereby committing to align our operations and strategies with the UNGC principles on business and human rights. We support its "protect, respect and remedy" framework and its principles of due diligence. Furthermore, our Code of Conduct requires compliance with all applicable laws and respect for internationally recognized human rights in all global operations.

We also recognize the International Labor Organization Declaration on Fundamental Principles and Rights

at Work. Adopted in 1998, the declaration commits member states to respect and promote principles and rights in four categories, whether or not they have ratified the relevant conventions: freedom of association and elimination of discrimination in employment and occupation, the right to collective bargaining, the elimination of forced or compulsory labor, and the abolition of child labor.

### Guided by deeply engrained principles in our culture

At 3M, the respect for human rights is deeply engrained in our culture. Within our own business, 3M's approach for managing and assuring human rights is derived from 3M's [Code of Conduct](#), which recognizes the right of employees to have a respectful workplace. This culture continues through our human resources policies, programs, and management systems, including 3M

[Leadership Behaviors](#). We continue to implement our human rights program through our global policies, management system, assessments, audits, training, and ultimately, metrics tracking. Our audit process is truly global, and we are increasing the number of assessments we are performing, which gives us a global perspective on our own internal locations, including all manufacturing locations.

### Human rights elements brought to life

Our commitment to upholding human and workplace rights is embodied in the 3M Human Resource (HR) Principles, which respect the dignity and worth of all individuals, encourage the initiative of each employee, challenge individual capabilities, and provide equal opportunity for development.

### A respectful workplace

As part of 3M's Code of Conduct to [Be Respectful](#), the [Respectful Workplace Principle](#) states that "everyone is entitled to respectful treatment in the 3M workplace. Being respectful means being treated honestly and professionally, with each person's unique talents, background, and perspectives valued. A respectful workplace is free from unlawful discrimination and harassment, but it involves more than compliance with the law. It is a work environment that is free of inappropriate or unprofessional behavior and consistent with 3M's ethics and values — a place where all employees can do their best, and are free to report workplace concerns without fear of retaliation or reprisal."

### Working hours and living wages

3M complies with minimum wage legislation globally, and we make every effort to exceed legal minimum wage. Our competitive compensation reflects our practice of establishing competitive salary ranges based on actual pay data from benchmark peer companies in

manufacturing. 3M also complies with all applicable laws relating to overtime and breaks. Additional information can be found in our [compensation section](#).

### Freedom of association and the right to collective bargaining

3M works diligently to create a work culture that affords all employees the opportunity to work without fear of intimidation, reprisal, or harassment, in an environment where employees are able to get their questions addressed in a fair and timely manner. In all locations, the company's relationship with employees, whether union or nonunion, is a key responsibility of all leaders, assisted by human resources representatives. Human resources professionals work with employees to maintain positive employee relations.

Our Human Rights Policy has a specific subdivision on the freedom of association, which assures that we respect "the ability of employees to choose whether or not to join unions and engage in collective bargaining, as permitted by applicable laws in the countries

where 3M does business." In the event of business operations changes, we follow all applicable local laws and regulations regarding notice periods for both union and nonunion employees.

Approximately 8 percent of 3M's global workforce is unionized, with the number rising to 21 percent when labor agreements are included. We are aware that in some countries, collective bargaining rights are not protected or recognized. Nevertheless, 3M assures that freedom of association and collective bargaining aspects of our Human Rights Policy apply to all 3M employees worldwide.

### Child labor and minimum hiring age

3M is committed to doing our part to help abolish child labor. This commitment is evident in our Human Rights Policy and [Supplier Responsibility Code](#). Although the permissible hiring age for employees may vary based on the laws of different countries, 3M has adopted global expectations regarding the hiring of minors. Even if local law permits it, 3M will not hire any employee nor engage a contingent worker (individual provided by a third-party staffing

agency to perform temporary work) below the age of 15 for any job. If the applicable laws impose a higher minimum age requirement than 15, 3M follows the stricter standard in compliance with the law.

Forced and compulsory labor

3M complies with all applicable laws and employment regulations and does not engage or participate in forced labor. We have those same expectations for all vendors doing business with us. This commitment is evident in our Human Rights Policy and Supplier Responsibility Code.

Safe and healthy workplace

3M policies assure that the company provides a safe and healthy workplace to all employees, and that the 3M workplace complies with applicable laws, regulations, and policies.

3M’s facilities are secured and monitored to protect 3M’s property, assets, people, and operations, and are accessible with badge access. Uniformed security workers support and assist workers and

visitors in both emergency and non-emergency situations such as accidents, incidents, loss or theft, suspicious items or behaviors, and lock-outs. 3M’s Global Security Operations Center (GSOC) monitors risks and intelligence sources worldwide and supports local operations in severe situations. 3M Alert emergency messages inform workers of safety and security threats and situations and also provide a response mechanism to check on the safety of workers after a catastrophic or severe event. The GSOC also manages traveler safety, using 3M-provided tools and resources to help employees anticipate disruptions and easily change their travel plans if needed, and to provide emergency care and services if needed.

Additional information can be found in the [health and safety section](#) of this report.

Healthy living

Health, wealth, wellness, and resilience create a framework for a collection of programs, resources, and services designed to help employees and their families achieve their well-being goals. While programs and services vary globally, examples include

free flu shots, health-conscious options in the cafeterias, travel kits, and immunizations for travelers, on-site fitness centers and medical care, telehealth, adoption and foster care support, and the FlexAbility approach to providing more flexibility to help employees optimize their work and personal life through one-on-one planning with their supervisor.

Additional information can be found in the [employee programs section](#) of this report.

3M Medical

3M Medical is committed to protecting and enhancing the health and productivity of our employees. We promote a culture of health and well-being at 3M by understanding and addressing the potential stressors in the workplace and promoting disease prevention and health improvement. We also respond to health concerns of our workforce and communities and provide medical care for our employees.

Our programs are designed to prevent health-related problems. Clinical services for illness and injuries are offered at 3M facilities worldwide. 3M's Medical Record

Standard defines the rules that must be followed to protect workers’ medical information. This standard assures that 3M medical information is handled in a manner consistent with the 3M Data Privacy Principle. The standard covers access, collection, storage, security, release of information, transfer of records, record retention, and record destruction.

Some of our preventive programs include hypertension management, cardiovascular risk reduction, smoking cessation, and nutrition consultations and cancer prevention in partnership with the Healthy Living program.

International travel health

Our travel health team prepares 3M employees for international business travel through comprehensive travel health consultations that include a personal health history review, immunizations, appropriate travel medications, and travel health education. We also assist all of our employees who may require medical assistance while away from their home base.

Medical surveillance

We monitor our employees periodically based on their potential exposure to chemical and physical hazards in the workplace. We screen for early signs of occupational illnesses to protect workers from further exposure and provide prompt care. We also look for trends in the health data in working populations to assure that potential hazards are well-controlled. While many of these programs are mandated by government requirements, others are established to meet 3M’s more protective standards.

3M is one of the few companies supporting an internal occupational epidemiology program. For the past 24 years, this group has conducted epidemiologic studies to examine health outcomes among 3M manufacturing workers and their potential association with occupational exposures and other workplace conditions. Occupational epidemiology research is used to inform risk assessments and the development of risk management activities within 3M.

Human trafficking

Our approach to human trafficking, sometimes referred to as “modern slavery,” is very simple: We do not tolerate it.

Our Human Rights Policy details our prohibition on human trafficking. We are committed to using effective systems and controls to prevent human trafficking from taking place anywhere within our business or supply chains.

These prohibitions apply to 3M and its subsidiaries as well as to our federal contracts and subcontracts for either commercial or non-commercial items.

Expectations regarding labor and human resource practices also apply to all of our suppliers worldwide (see the [supplier section](#) of this report for more details). 3M suppliers must comply with all local country labor and human resource laws and cannot use labor that is obtained through mental or physical coercion, physical punishment, slavery, or other oppressive labor conditions, and cannot engage in any form of human trafficking.



Security personnel training and procedures

With the alarming rise in corporate security breaches worldwide, our Human Resource Security Standard presents the controls required to achieve human resource security based on industry standards and best practices.

Roles and responsibilities of information security employees, contingent workers, and suppliers must be defined and documented in accordance with the 3M Information Security Management System (ISMS). Background checks verify on all candidates for employment, contingent workers, and suppliers must be carried out in accordance with relevant laws, regulations, and ethics, and be proportional to the business requirements, the classification of the information to be accessed, and the perceived risks.

As part of their contractual obligation, employees must agree to and sign the terms and conditions of their employment contract, which states not only their own, but their organization’s responsibilities for information security. Contingent workers and suppliers in the U.S. are required to review and

acknowledge 3M’s Systems Access Control Standard and other 3M policies and standards.

Management requires employees, contingent workers, and suppliers to apply security in accordance with established policies and procedures. All 3M employees and, where relevant, contingent workers and suppliers, must receive appropriate awareness training and regular updates in organizational policies and procedures, as relevant for their job function.

Filing, addressing, and resolving workplace concerns

When concerns related to human rights, labor practices, environmental, or safety issues arise, our employees and non-employees are encouraged and trained to raise questions or report misconduct or potential misconduct. We provide a variety of mechanisms for reporting and resolving concerns:

- Employee’s management and/ or human resource manager
- 3M legal counsel

- 3M Compliance and Business Conduct Department
- [3MEthics.com](#)

See 3M’s [Business Conduct website](#) for more information regarding how to report a concern. Additional information can be found in the [Code of Conduct section](#).

3M prohibits retaliation against anyone who asks a question, reports a concern in good faith, or participates in a company investigation. This position is reflected in the Non-Retaliation Policy and within 3M’s [Employee Obligations and Reporting Principle](#).

In addition, we conduct audits of site, workplace, and human resource practices, and we conduct assessments and audits of suppliers to assure compliance with 3M’s expectations related to labor practices (see the supplier section of this report for more details).

Assuring human rights through training

We perform global training to assure that all 3M employees comply with the law, 3M’s Code of Conduct, supporting policies,

standards, and procedures. 3M’s Compliance and Ethics Department offers a comprehensive online compliance training program for all employees worldwide so 3M employees are aware of and understand their responsibilities and obligations.

Our online training program assigns training modules to each employee based on their role and area of responsibility. An annual training plan is established each year based on an assessment of internal and external factors for prioritizing topics and timing of deployment. This includes a series of new employee onboarding courses. New employees receive email notifications about course assignments and timeline for completion. New employee courses are due within 60 days of assignment.

Our actions  
Strong support for human rights charters

3M continues to support several human rights charters. Among them:

- United Nations Global Compact
- Universal Declaration of Human Rights
- European Convention on Human Rights
- United Nations Guiding Principles on Business and Human Rights
- International Labor Organization’s Declaration on Fundamental Principles and Rights at Work
- OECD — Organization for Economic Co-operation and Development Guidelines for Multinational Enterprises, including OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
- Agenda 21 — United Nations Convention against Corruption

Holistic approach to human rights due diligence

The 3M Code of Conduct describes the [company’s business conduct principles](#), or core values, which set forth global corporate expectations for all 3M employees and third parties who act on 3M’s behalf. The principles in this Code remain consistent with 3M’s long-standing business conduct principles, its values, and our shared ethical standards for conducting business with uncompromising honesty and integrity.

In our view, human rights due diligence requires a holistic approach. We assess our own business, and others acting on our behalf — in supply roles, government relationships, acquisitions, mergers, and divestitures — to identify the salient human rights issues applicable to our business. We have a grievance mechanism in place, 3MEthics.com, which can be used to raise a concern regarding any adverse human rights impacts. We also comply with all applicable laws and honor

the principles of internationally recognized human rights when faced with conflicting requirements.

### Assessing human rights

Our assessment on human rights aligns with our corporate Human Rights Policy, as outlined under Our

commitment, and includes these points of review: safe and healthy workplace, respectful workplace, workplace security, work hours and wages, freedom of association, child labor, forced labor, human trafficking or recruitment fees to obtain employment. Evaluations are integrated into other assessment and management processes

and are based on material issues regardless of where they’re identified within the value chain.

Based on this assessment process, we have determined that in our various spheres of influence (our own business and others acting on 3M’s behalf), the sphere with the greatest potential for human rights impact is within our supply chain.

Segment	Salient risk*	Action plan to address
3M employees	Assuring conformance with the <a href="#">3M Code of Conduct</a>	See <a href="#">Code of Conduct section</a> for additional details on our actions
Others acting on 3M’s behalf	Unsafe working conditions, mistreatment of workers	See <a href="#">Workplace Environmental, Health, and Safety Principle</a>
Suppliers	Assuring conformance with <a href="#">3M Supplier Responsibility Code</a> expectations	See <a href="#">supplier section</a> for details on our risk-based supplier assessment process
Government relations	Not adhering to all applicable laws, rules, and regulations	See <a href="#">Doing Business with Government Agencies and Contractors Principle</a> for more information
Acquisitions, mergers, and divestitures	Failing to recognize human rights issues during the acquisition integration or divestiture process	Prioritize and address human rights issues relative to risk and compliance; see <a href="#">Human Rights Policy</a> , <a href="#">Respectful Workplace Principle</a> , and <a href="#">Workplace Environmental, Health and Safety Principle</a> for more information
Local communities and customers	Inequitable opportunities to succeed in science, technology, engineering, and math (STEM); skilled trades occupations	Assess community partnerships to assure support is dedicated to underrepresented populations to receive equal pay for equal work; see our <a href="#">community section</a> for additional information
*Risks as per human rights (safe and healthy workplace, respectful workplace, workplace security, work hours and wages, freedom of association, child labor, forced labor, or recruitment fees to obtain employment, and human trafficking)		

### Within our own business

Within 3M, our approach to managing and assuring human rights aligns with the 3M Code of Conduct, which recognizes the right of employees to have a respectful workplace.

To protect that right, our Employee Relations (ER) Assessment tool enables any 3M location globally to assess its policies and practices. Using the tool, and tracking data throughout the assessment process, leaders can review practices related to 3M’s Human Rights Policy, identify strengths and opportunities for improvement, and develop an action plan for closing any potential gaps. Our ER organization audits locations around the globe to ensure adherence to our principles, policies, and procedures.

For additional details on our employee processes, see the [diversity and inclusion](#) and [employee programs section](#).

### Others acting on 3M’s behalf

Upholding 3M’s Code of Conduct and values is the responsibility

of everyone acting on 3M’s behalf. Multiple processes are in place to assure 3M’s principles are being upheld by these parties. Case in point: our approach to health and safety.

Under our [Workplace Environmental, Health, and Safety Principle](#), 3M’s Code of Conduct requires 3M employees to select and retain suppliers, contractors, or outsourced manufacturers and service providers who comply with all applicable laws and regulations and meet 3M’s environmental, health, and safety values. In addition, at 3M locations, all visitors, vendors, and contract workers are held to the same safety and health requirements as 3M employees.

See the [health and safety section](#) for additional information on this assessment process.

### Our suppliers

At 3M, we recognize the choices we make for our material and service providers must also reflect our values. We want our suppliers to share our commitment to maintaining compliant, responsible, and sustainable operations and practices. In addition to full

compliance with all applicable labor and human resource laws, we expect our suppliers to be committed to upholding the human rights of workers, and to treating them with dignity and respect as understood by the international community. This applies to all workers, including temporary, migrant, student, contract, and direct employees. These expectations are laid out in the [3M Supplier Responsibility Code](#), and we have a 2025 goal to drive supply chain Sustainability through targeted raw material traceability and supplier performance assurance.

For details on our risk-based supplier assessment process, see the [supplier section](#).

### Government relations

Under our [Be Fair Principle](#), 3M is committed to be a responsible company with uncompromising integrity in all its dealings with local, state/provincial, and national governments, and their prime contractors and subcontractors around the world. In all our activities with governments, we carefully follow all applicable laws, rules, and regulations.



Before entering into any government contract, or any agreement related to a government customer, 3M employees must consult 3M’s Government Contract Compliance Department or their business groups assigned legal counsel.

Human trafficking and forced labor-related provisions are also included in 3M’s government contract flow-down requirements for suppliers. In the United States, the government has adopted a regulation (FAR 52.222-50) prohibiting human trafficking, including slavery, servitude, forced and compulsory labor, and coercion to induce a commercial sex act or to procure the same — all of which result in the deprivation of a person’s liberty by another in order to exploit them for personal or commercial gain. 3M has implemented processes to assure compliance with the U.S. FAR, including a Human Trafficking Prevention Standard.

For more information, see [Doing Business with Government Agencies and Contractors Principle](#).

**Acquisitions, mergers, and divestitures**

3M regularly pursues the sale and purchase of business interests. For each business that may be acquired or divested, human rights issues are prioritized and addressed relative to risk and compliance during the acquisition integration or divestiture process.

Additional information can be found in our [Respectful Workplace Principle](#) and [environmental management section](#) of this report.

**Partnering with local communities and customers**

Under our [Be Respectful Principle](#), 3M’s core values include treating each other and our stakeholders with respect and respecting our social and physical environment.

With our Every Life Ambition, we work to imagine a world where every life is improved. The power is in partnership. As a global corporation, we believe that we have a significant responsibility to society in general, and

especially to the communities in which we live and work.

We have created a robust, stakeholder-driven approach to Sustainability materiality that includes human rights. Our materiality assessments and stakeholder engagements are vital components of our company’s strategy and reporting. Details of our materiality assessment can be found in our global challenges section. Our [2025 Sustainability Goals](#) were developed from the materiality assessment.

For additional information on our stakeholder engagements, see the [global challenges section](#).



**Looking forward**

3M is committed to upholding legislation designed to eradicate modern slavery and human trafficking. In 2019, we will be tracking new country laws, including the Australian Modern Slavery Act. As always, we seek to strengthen our due-diligence management system to identify and address any salient human rights issues within our sphere of influence and stay aligned with internationally accepted frameworks like the United Nations Guiding Principles.

# Compensation

## Competitive and comprehensive. Across the board and around the globe.

### Our commitment

3M is committed to providing competitive market pay and comprehensive benefits. In addition to providing a professional work environment that promotes innovation and rewards performance, 3M’s total compensation for employees includes a variety of components that support sustainable employment and the ability to build a strong financial future.

### We believe in pay for performance

3M is a pay-for-performance company. In addition to earning base salary, executives are compensated for their contributions to the company’s growth, profitability, and other goals. This compensation falls into one

of two categories: short-term cash incentives in the form of an annual performance-based award opportunity, as well as long-term equity incentives in the form of annual awards of performance shares and stock options, and in certain circumstances (for purposes of hiring or retaining key talent, for example), grants of restricted stock or restricted stock units.

As detailed in the [3M Board of Directors’ Compensation Committee Charter](#), all aspects of compensation are reviewed regularly by the [Compensation Committee](#), which is composed solely of independent non-employee directors. The committee, along with their independent compensation consultant, assesses the design and risks associated with executive compensation and recommends changes, when appropriate. Its recommendations related to compensation for 3M’s Chief Executive Officer are subject to ratification by all

of the independent members of the Board of Directors.

The Compensation Committee reviews stakeholder proposals relating to executive compensation matters and recommends to the Board the company’s response to such proposals.

3M executives are also eligible to participate in three deferred-compensation plans that enable them to save for retirement or for other reasons and receive certain other benefits, such as financial planning services. Approximately 100 executives were eligible for this program in 2018, including all of the named executive officers.

[3M’s 2019 Notice of Annual Meeting and Proxy statement](#) provides additional detail on executive compensation.

### Director compensation philosophy and elements

[The Nominating and Governance Committee](#) periodically receives reports on the status of the Board’s compensation in relation to other large U.S. companies and is responsible for recommending to the Board changes in compensation for non-employee directors. In developing its recommendations, the committee is guided by the following goals:

- Compensation should fairly pay directors for work required in a company of 3M’s size and scope
- A significant portion of the total compensation should be paid in stock to align directors’ interests with the long-term interests of stockholders
- The structure of the compensation should be simple and transparent







Periodically, at the request of the Nominating and Governance Committee, Frederic W. Cook & Co., Inc. conducts a survey of director compensation at other large U.S. companies and provides expert advisory support to the

committee on the compensation of non-employee directors.

### Here, we are all leaders

Compensation to 3M employees is not just tied to their job description, but how they act on it. This holds true for general leadership responsibilities, as well as performance related to Sustainability issues. 3M Leadership Behaviors, standards set forth in the 3M Playbook, establish expectations and ways everyone can demonstrate and meet those expectations through their actions and interactions.

#### Six behaviors of effective leaders at 3M:

-  Play to win
-  Foster collaboration and teamwork
-  Innovate
-  Prioritize and execute
-  Develop others and self
-  Act with integrity and transparency

3M innovation takes a lot of people who are constantly searching for new and better ways to make innovation happen. People who challenge the status quo and welcome change. And people who know how to leverage internal and external networks to create win-win solutions.

To make sure we are constantly innovating, our leaders must create an environment that allows and challenges people to seek out new ideas and process improvements that drive success. Our “Innovate” Leadership Behavior includes an expectation to support 3M’s Sustainability goals.

Ratings of achievement against measurable targets impact employees’ award values for those who are eligible for variable compensation. For those employees eligible to receive long-term incentive compensation, ratings of Leadership Behaviors impact their long-term incentive grant values.

### Earn up to your true potential

All employees have the opportunity to grow through challenging work and be rewarded for their efforts.



Our employee performance review process directly connects to an individual’s compensation. The intent of the process is to align individual goals and performance with business objectives and outcomes, creating a win-win situation for the employee and the company. In addition, the process helps identify and develop leaders to meet 3M’s ongoing talent needs.

Additional information on 3M’s employee development and compensation can be found in our [employee programs section](#) and at [3M.com](#).

## Our actions

3M has an industry-leading formula for compensation that helps provide equitable pay for all employees. We compare 3M salary data and compensation practice annually, and make both market and competitive adjustments as needed to assure our pay levels at each grade level are competitive. Ultimately, we factor in performance accelerators based on an annual performance review and the Leadership Behaviors discussed in Our Commitment.

At 3M, the proportion of total rewards aligned with variable (incentive) pay increases with job level and is reflective of the job level’s influence on both short- and long-term results. Eligibility for 3M’s Annual Incentive Plan (AIP) and Long-Term Incentive Plan (LTIP) is based on job level, considering both the job level’s ability to influence the incentive period being measured and market competitiveness for these types of compensation.

Additional information on 3M Total Rewards can be found in our [employee program section](#).

## Pay based on role, responsibilities, skills, and performance

We maintain our focus on our global compensation principles to provide market-competitive, fair, and equitable pay. We continue our journey to assure we appropriately benchmark compensation within our many locations globally and use consistent methods of analyzing our compensation position against the market. Efforts continued in 2018 to standardize and simplify our methodology around market pricing, utilizing data sources from multiple vendors. As we

move forward, we will continue to look for ways to handle this process in an increasingly efficient and consistent manner.

Our Global Market Pricing Process assures market-competitive compensation for employees and drives consistency and transparency in compensation practices across all regions. Using common job descriptions and grades throughout the world, this project used data from three global surveys to benchmark pay levels and map job grades, which helps drive our pay principles for fair and equitable pay.



Looking forward

## Delivering on the promise of fair and equitable pay

3M has the same annual incentive plan design for everyone, from our executive officers all the way through the entire organization — the same payout curves, thresholds, maximums, metrics, and metric weightings. By direction from the Compensation Committee of the Board of Directors and our continuous improvement efforts, we redesigned the AIP to bring the payout curves closer to those of our peers. Peers include companies we compete with for investors, executive talent, and general employee talent. Moving forward, with the new payout curves, our plan is designed to be more competitive, pay out higher when we exceed targets, and hit the maximum sooner than in the past. But it’s a give-and-take situation: In order to provide the chance for a better upside payout, we must accept the additional risk of a smaller or no payout if we don’t meet targets.

In 2019, the Compensation Committee formally added a review of matters relating to internal pay equity to their list of responsibilities.

# Employee programs

## A culture that nurtures.

### Our commitment

At 3M, our culture is critical to enabling the magic we know as science. It's extremely important that all our employees are able to focus on making an impact on the world and feel empowered to bring innovation into their work.

Engaged employees, we believe, are more satisfied with their work, tend to stay longer, and are more productive and committed. We foster and reinforce behaviors that support engagement on many levels, including networking, collaboration, diversity, and inclusion. We focus on the quality and the impact of professional development and career growth.

If you want to develop as an individual, there are many things that make 3M the place to be. Our science not only impacts our customers

around the world, it makes a difference in the way we work.

Our company touches nearly every industry in every market globally. If you work at 3M, you have a range of development opportunities few other companies can offer. Our people can live in different countries, learn different cultures, and develop different skills across different industries.

It's possible for someone to go from a lab, to marketing, to sales, to business development, and all the way up to the C-suite. 3M is so diverse that people can reinvent themselves and their career all within one company — and so inclusive that they'll be able to collaborate with other curious, creative minds wherever they go. For more information, see the [employee diversity and inclusion section](#).

### 2025 Goal: 100 percent participation in employee development programs to advance individual and organizational capabilities.

Our employees are encouraged and supported to pursue areas of interest and develop career paths and opportunities aligned with those interests.

### Our actions

Our most valuable resource is our people, and we invest in their success. We offer a wide range of benefits and discounts designed to help our people live their best. We also provide tools, opportunities, and support for people who want to grow their careers.

### Ever going, ever growing

At 3M, our 91,500 employees do work that matters, applying our science in ways that make a positive impact on people's lives. Today's business environment demands that we become faster and more flexible in anticipating and exceeding the needs of our customers, shareholders, and employees. Creating a high-performance culture built on continual learning helps 3M achieve business growth for the company and professional growth for employees.

### Investing in our people

The growth of our people is essential to the growth of our business. Although we achieved over 25 hours per year of training and development per full-time equivalent (FTE) employee, those hours are only one part of the picture. We leverage a 70-20-10 development model which indicates that, over the course of a career, 70 percent of learning is done on the job, 20 percent comes through other employees, and only 10 percent of meaningful

development is reached through formal training.

Our learning orientation and philosophy focuses on experiential learning and skill building rather than classroom-style training. While we can estimate that our training numbers are close to averages found in other large manufacturing companies, measures such as training hours or costs per employee are not leading human capital performance indicators for 3M. We believe indicators that align people's results to the success of the company are direct performance indicators of development programs. Leadership and employee engagement, employee retention rates, brand recognition, acquisition integration milestones, and Lean Six Sigma (LSS) project value are a few examples of indicators that contribute to 3M's recognition as an industry and global business leader.

3M has prioritized learning and career development opportunities not only for leaders, but for all employees. Further, 3M has separate processes for employee performance and career development. This permits employees the freedom to create meaningful development

plans without performance or compensation implications.

### Employee development for all

Effective employee development programs are crucial to enable our goal of 100 percent of employees engaging in development activities. With the global launch of our new employee learning platform, Develop U, employees are easily able to access development resources to support their career aspirations and advance strategic capabilities within 3M. Develop U provides employees with a personalized experience by recommending relevant content based on their role within the organization. Additionally, content is organized and aligned to directly support our organizational priorities, including the 3M Leadership Behaviors, company-defined functional competencies, LSS, Sustainability, and supervisory content. Develop U provides access to tens of thousands of unique, just-in-time learning resources in over 15 languages, allowing 3M's global workforce to engage in employee development. Given this breadth, we've seen more than 50 percent of our global workforce engage



in formal training on Develop U. Further, 2018 saw the broad-scale launch of virtual, instructor-led trainings and webinars, facilitated through Develop U. These and other live events pushed our live event completions total to over 102,000 and reached both production and non-production employees globally.

Employees create or update development plans that include activities to elevate individual skills and further career development. Employees can use additional skill-mapping tools in collaboration with their supervisors to identify long-term desired goals and define actions needed to help reach those goals.

A key part of career development is understanding career paths and resources. 3M makes available to employee’s functional competency models that clarify expectations regarding the knowledge, skills, and abilities to be developed over a career within a specific function. Based on shared expectations, career paths are aligned with investment in training and development resources. Each function follows its competency model to leverage 3M’s learning platform and direct employees to relevant training opportunities.

Functions also provide development suggestions that can grow the competency through on-the-job activities or social learning through a coach or mentor. Currently, the competency-based resources cover approximately 93 percent of the non-production professional employee population.

At 3M, wisdom is shared. Just as we share and combine our technologies, we also share and combine our knowledge through mentorship and storytelling. We define mentoring as a unique relationship in which a mentor (a more experienced person) helps a mentee (a less experienced person) with their development in a particular area. Further information can be found at [Mentorships at 3M](#).

**Doing things right, right from the start**

3M invests in onboarding and developing new employees so that they have the tools, resources, and networks they need to succeed. Our onboarding process begins at the time a candidate accepts a job offer and continues through the first year of employment.

A consistent, comprehensive onboarding platform provides pre-start information delivery and engagement for new employees on the front end, and clear metrics, reporting, and tracking for 3M on the back end. This investment sets up new employees to succeed and make meaningful contributions from the start.

**Nurturing the leader in everyone**

Leadership development is a competitive advantage at 3M. To maintain this advantage, we are leveraging new technologies and delivery methods, thereby assuring impact, consistency, and global inclusivity.

Through various stages in a leader’s career journey, there are many development opportunities and programs available, across every geographic region and 3M business. Programs include a range of online and self-paced offerings, from personal effectiveness to financial acumen, that cover core skill development aligned to the 3M Leadership Behaviors. These programs also focus on the

future by embedding inclusive leadership strategies, promoting development through corporate social responsibility, and offering mentoring opportunities.

**Global executive and leadership development**

The 3M Leadership Way is a suite of high-potential leadership development journeys within the 3M Global Academy of Innovative Development, bringing one consistent approach to how 3M develops leaders across all geographic areas, business groups, and functions. Each program is an integration of customer-focused, results-driven, and experience-based learning that takes leaders outside the classroom walls to sharpen their skills with leadership challenges for our customers and in our global communities.

**Catalyst**

Catalyst is a 12-month journey focused on developing the company’s top 250 leaders. These individuals are game changers with aspiration, potential, performance, and with a pace even beyond their high-potential peers to

make a step-change impact for 3M and the world we live in.

**Amplify**

Amplify is a nine-month journey for leaders with potential to reach the director level. Similar to the Catalyst journey, Amplify is scaled to the leadership challenges faced by future directors. These individuals already lead teams and organizations across every part of 3M.

**Ignite**

Ignite is a six-month journey for leaders with potential to reach senior manager level. These individuals are transitioning to lead teams, and development is focused on critical challenges such as vertical and horizontal management savvy and building and leading high-performing teams.

**Spark**

Launched in 2017, Spark is a yearlong development journey for individual contributors and frontline leaders with potential to reach manager level. For the first time, 3M has leveraged the power of technology to offer

leadership development and bring together (virtually) more than 3,700 leaders from around the world under one journey.

**Development for people leaders**

With focus on the critical skills that leaders need to be successful in leading others, the Essentials for People Leaders program emerged as a multi-module program with flexibility to be delivered as face-to-face classroom training or as online, virtual training. This flexible delivery format is key to providing a consistent development experience for all leaders of 3M while still allowing for needed localization.

**All-leader development**

All our people globally, at every level of the organization at 3M, are provided with opportunities to develop themselves as leaders. These leadership development offerings target areas of strategic importance, including the development of a growth mindset, agility, innovation, and customer focus. Delivery of content is available face-to-face in experiential workshops, through

virtual instructor-led training, and via self-paced e-modules.

Coaching

3M has invested in an internal team of certified leadership coaches to support and accelerate the development of leaders around the world. These coaches work in a variety of ways with 3M leaders. We offer one-on-one time with a coach to help employees apply new learning or work through a change with on-demand coaching. We also work with teams to help them stay close to changing stakeholder expectations and lead 3M into the future. More than 725 leaders have already worked with a leadership coach at 3M. More than 3,000 leaders have been through a coaching skill-building workshop.

Be rewarded for your efforts

To drive 3M’s successes, we provide incentives to our employees to excel. Our process includes two components: measurable targets agreed upon by employees and their supervisor, and Leadership Behaviors ratings, which reflect the extent to which the employee engaged in core behaviors that

allow 3M to execute our strategies and meet our objectives.

The performance assessment process helps hold each of our employees accountable for his or her contribution and everyday behaviors. The process aligns personal goals with organizational goals — we strive to achieve our goals in ways that support and strengthen our culture and achieve sustainable growth. In addition, 3M has long prioritized taking a well-rounded view of an individual’s performance, assuring that employees are treated in a fair and consistent manner:

- Performance goals, linked to higher-level organizational goals, are set jointly between the individual and his or her leader
- Tools provided to leaders facilitate conversations between leaders and employees to assure mutual understanding of expectations and desired behaviors
- Feedback on progress toward these goals is provided formally, twice a year, and supervisors are taught and encouraged to provide routine feedback to help employees adjust performance and meet or exceed goals

- Management Team Reviews function not only to provide comprehensive information about an employee, but also to further the goal that rating considerations will be consistent for employees within an organization

Each year, all 3M non-production employees identify their contributions in meeting their specified goals through an employee performance process. 3M strives to have 100 percent of non-production employees complete the entire performance review process. In 2018, all eligible employees were rated through the calibration meetings, and these employees and their supervisors received tasks to complete the year-end process in the performance system.

Learning from listening

For more than 50 years, 3M has been conducting surveys to solicit employee observations, attitudes, and opinions. Our Standard Opinion Survey program covers the entire globe and provides specific and relevant feedback to major units within the company (divisions, locations, and countries, for example). All employees have the opportunity to complete the 3M Standard Opinion Survey,

and our average response rates are typically about 85 percent.

The Standard Opinion Survey program enables us to regularly assess the state of employee engagement and other workplace factors critical to high performance and being a great place to work. We provide in-depth reports for the leaders of the business groups surveyed and assure their leaders and top 3M leadership are aware of these survey results. This is a cycle of continuous improvement for us, year after year.

Each unit or business group that surveys must review their results, present them to their employees, and execute an action plan to address the issues that arise from the results. We built supports into our process that make it easier to bring about successful change through action planning — such as accountability checks and specific tools to act on the results. We identified key drivers of employee engagement and developed and deployed learning opportunities for leaders (multiple on-demand instructional videos on engagement, for example). We continually assess survey content and update as needed to assure alignment with company strategy and major

initiatives. Thus, our surveys support strategy and business objectives directed at supporting sustainable corporate success through our employees’ behavior on the job.

Long may your curiosity flourish here

Our global voluntary turnover rate continues to be under 6 percent, a source of great pride for our company. We calculate voluntary turnover separately from retirements, company-initiated turnover, and reductions in force. Voluntary employee turnover is defined as turnover due to employee-initiated reasons (for example, returning to school or going to another job in a different company).

Total turnover includes voluntary turnover and all other forms of turnover (for example, termination as a result of restructuring, termination for poor performance, and retirements). Our total employee turnover rate is an annualized rate that measures employees who have terminated or retired from 3M during the calendar year, excluding foreign service employees and 3M temporary employees.

Temporary employees are 3M employees hired temporarily with intent to be employed short-term. They do not include contingent workers.

3M follows all applicable local laws and regulations regarding notice periods in the event of business operations changes.

3M’s Human Resources Department is unique in that we have one global system to track HR information. At every 3M location around the globe, we have instant access to this information — using our global reporting tool.

Workforce experience, services, and rewards

The more 3M employees contribute to 3M’s success, the more success they create for themselves. We offer a competitive base pay, and depending on position, variable incentive pay linked to company and individual performance. We also offer a wide range of benefits and discounts designed to help 3M employees live their best.



## Be rewarded for your efforts

Medical, dental, and vision plan options; savings and retirement plans; a 3M employee stock purchase plan; and many other resources can enhance a 3M employee’s life, both physically and financially. All regular full-time employees in the U.S. are eligible for these benefits — regular part-time employees who work at least 20 hours a week are also eligible. Some programs and benefits may differ internationally due to local laws and regulations.

As of January 1, 2019, benefit eligibility also extends to domestic partners and their children.

Our parental leave policy helps employees be their best selves at home and at work. All U.S. salaried mothers and fathers of newborn or newly adopted children are entitled to up to 20 weeks (10 weeks paid and 10 weeks unpaid) of parental leave. This policy was instituted in late 2016. In 2018, 1,159 U.S. eligible employees participated, including 354 females and — we’re proud to say — 805 males.

In 2018, our overall U.S. work and retention rate, those returning

Employee parental leave		
Usage parental leave	2017	*2018
Female	306	354
Male	794	805
Total	1100	1159
Female returned	292	288
Male returned	765	732
Total returned	1057	1020
U.S. work retention rate	96.1%	88.0%
*2018 data may change. Some employees currently out on leave may be returning in 2019.		

after leave, was 81 percent for females and 91 percent for males.

Further information on 3M’s wide range of benefits, healthy living, and discounts designed to help employees live their best can be found at: Working at 3M: [Benefits](#).

## Highly competitive pay

We offer a competitive base pay, and, depending on position, variable

incentive pay linked to company and individual performance. For more details, see the [compensation section](#) and Working at 3M: Pay.

## Where and when to do your best work

Based on their job function, 3M employees and their supervisors can make individual arrangements for a flexible work practice that maximizes professional and personal productivity.

FlexAbility puts into practice a new way of thinking: that your work life and your personal life can coexist. A FlexAbility plan can put the power in your hands to make choices that benefit you, your work, your team, your friends and family, and 3M. For more details, visit [FlexAbility at 3M](#).

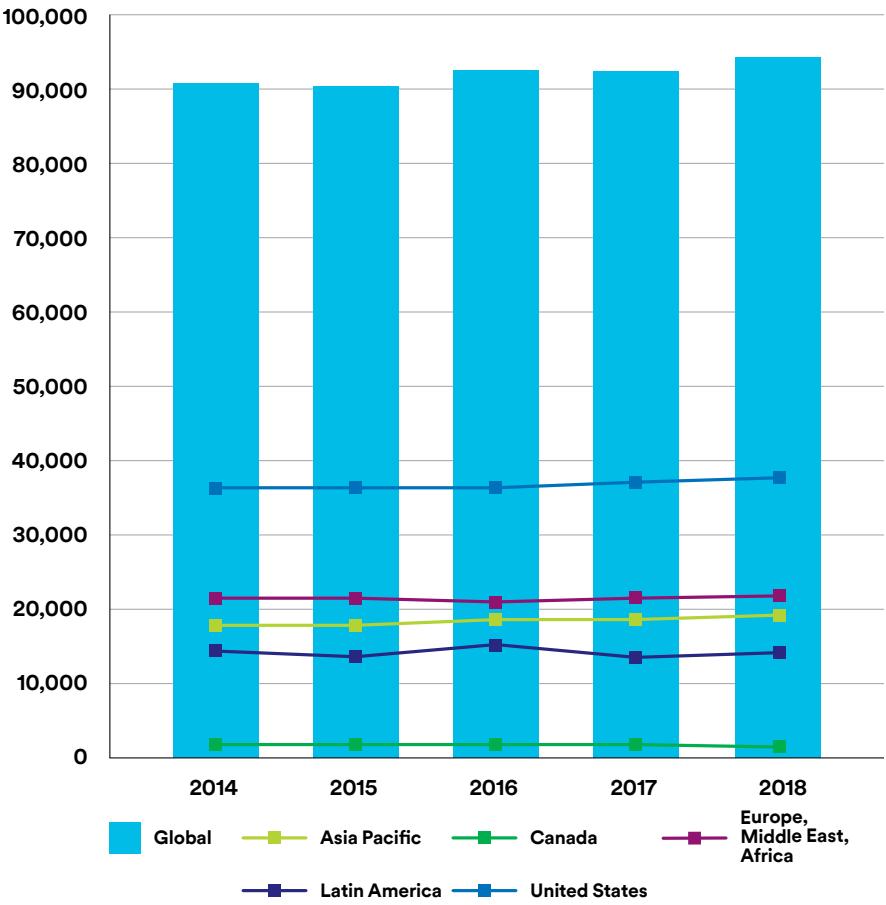
## Our footprint

Data related to employee metrics has been derived from our human capital management system. For the data in the charts provided below, 100 percent has been calculated with no assumptions. Additional information on data management can be found in the [about report section](#).

The employee metrics in the charts are reflective of employee headcount as of December 31, 2018 (total number of 3M full-time and part-time employees) not 3M full-time equivalent (FTE) employees. Due to acquisition integration schedules factored into 3M’s human capital management system, detailed employee information below may differ from employee totals in 3M financial reports.

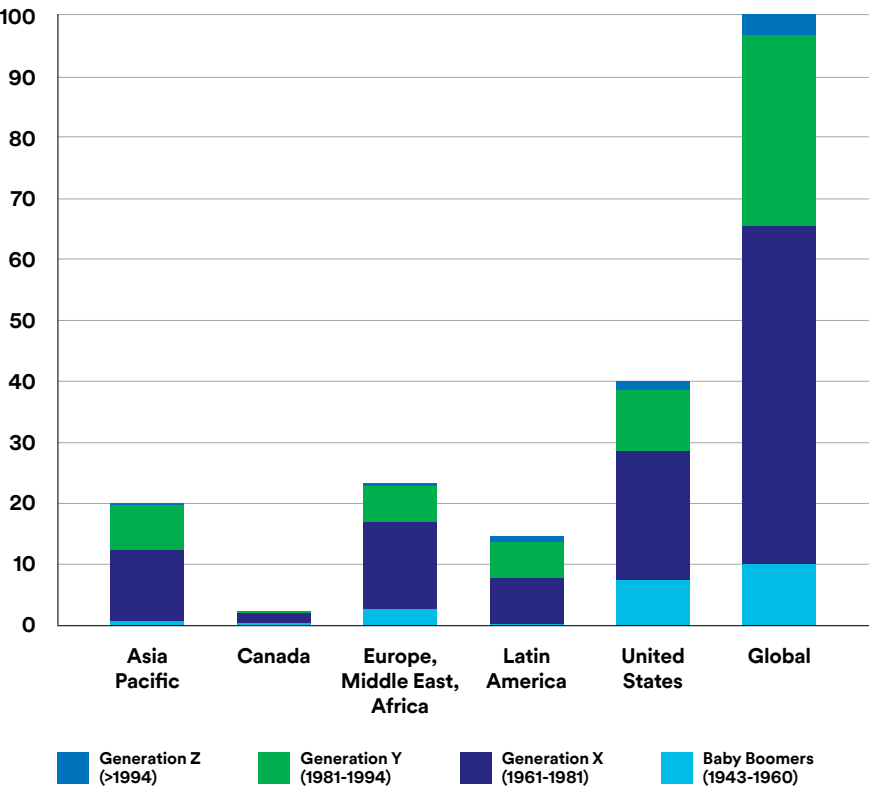
## 3M global employees by region

Full and part-time, total



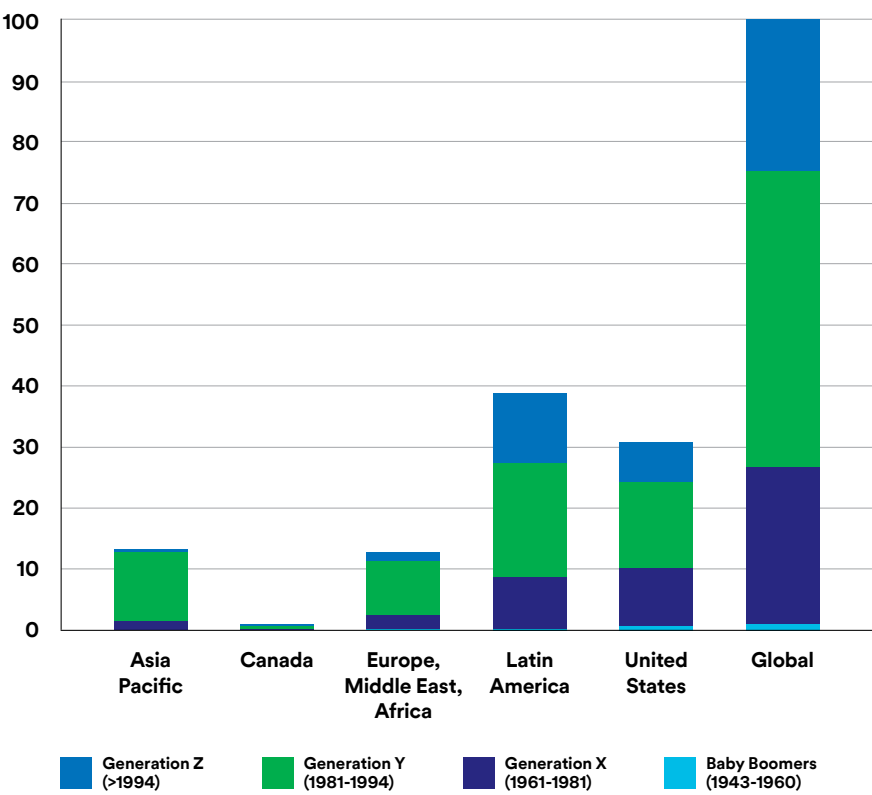
3M regional and global employee age distribution

Full and part-time, percentage of total



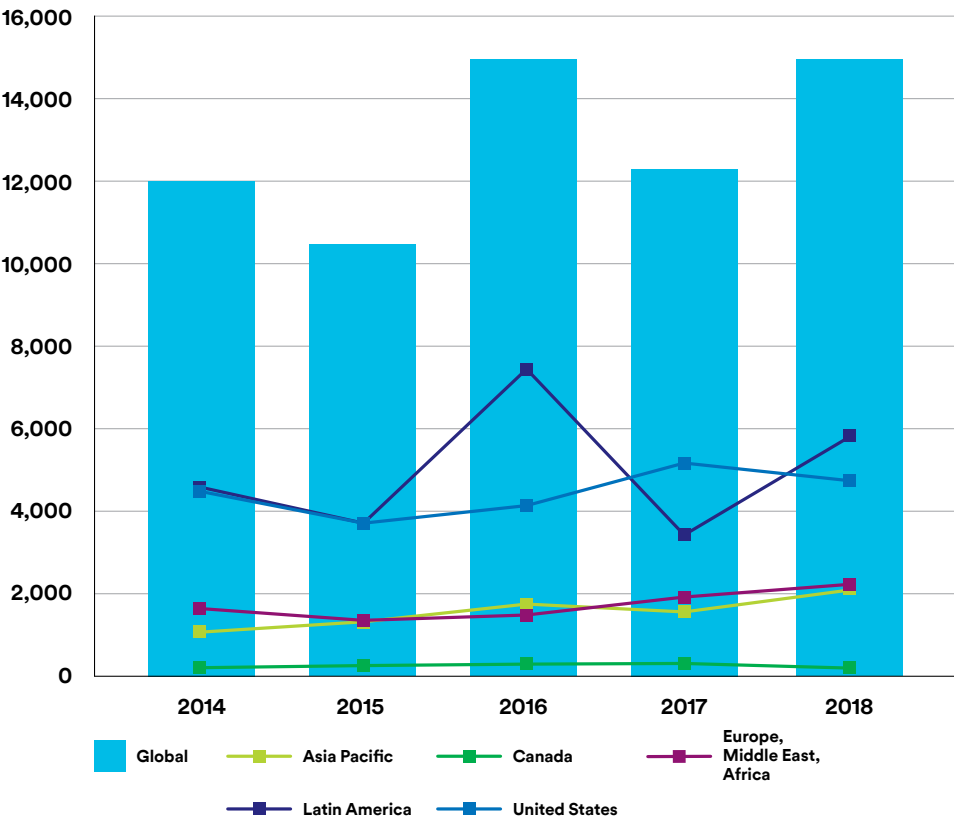
3M regional and global employee hires age distribution

2018 percentage



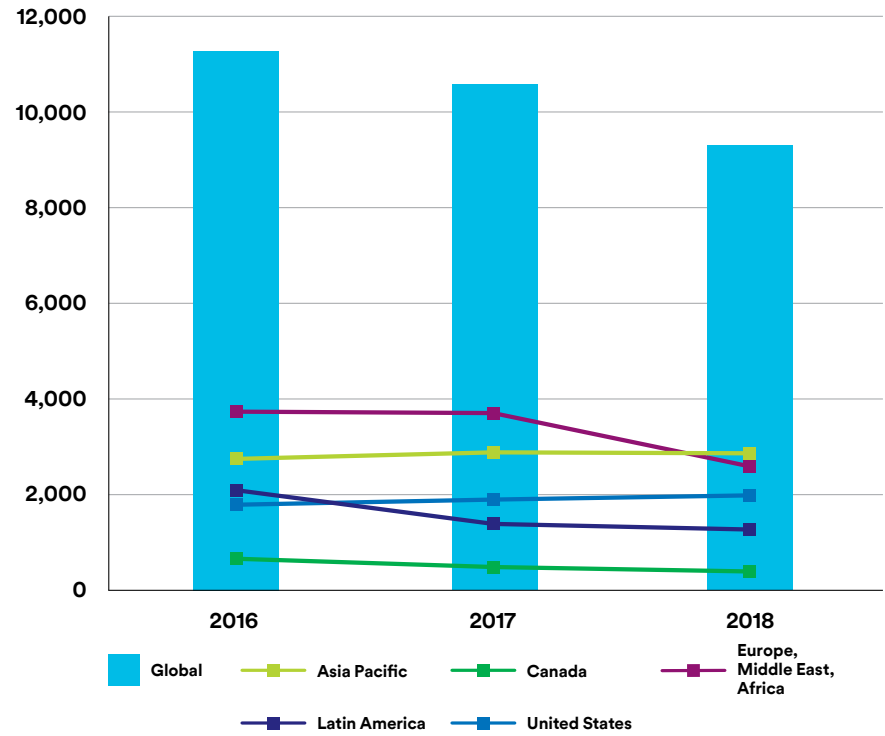
3M global new employee hires by region

Total



3M global contract employees by region

Permanent and temporary employment total

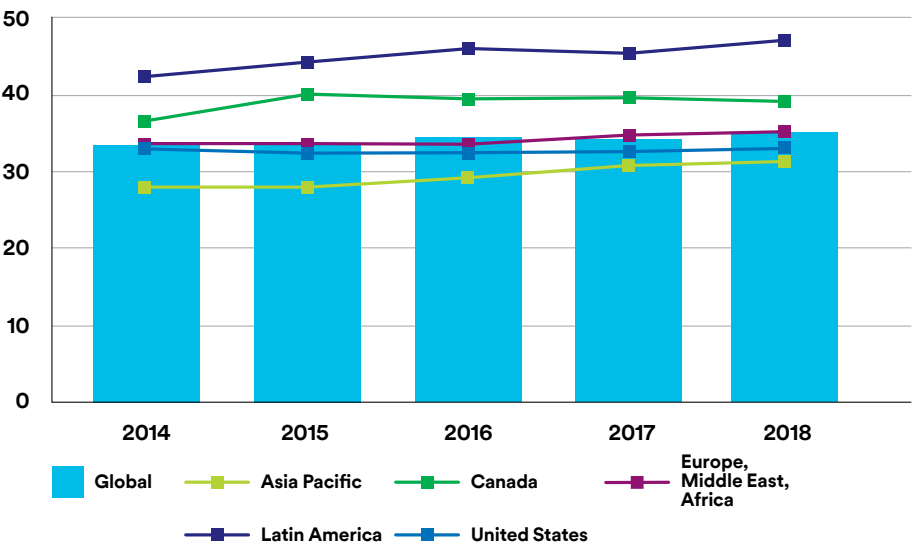


Contingent hourly or daily workers only, see GRI 102-8 and employee contract definitions



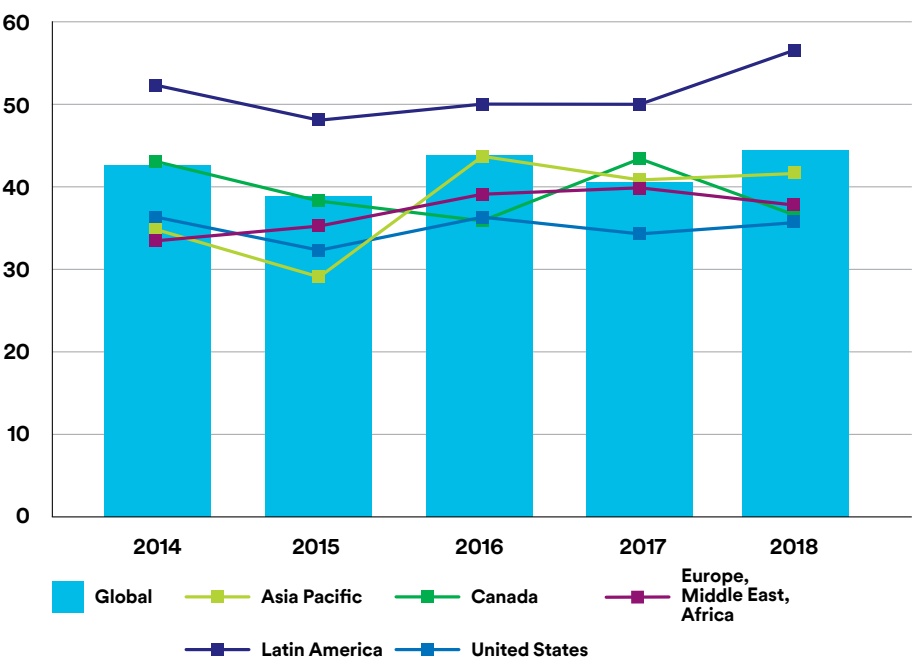
3M global female employees by region

Percentage of total employees



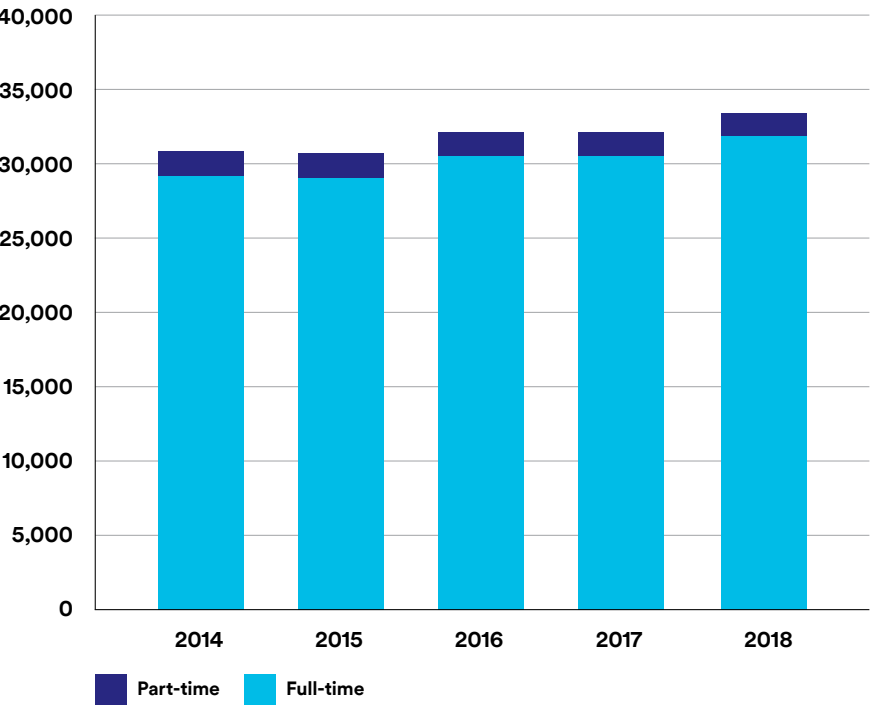
3M global female hires by region

Percentage of total hires



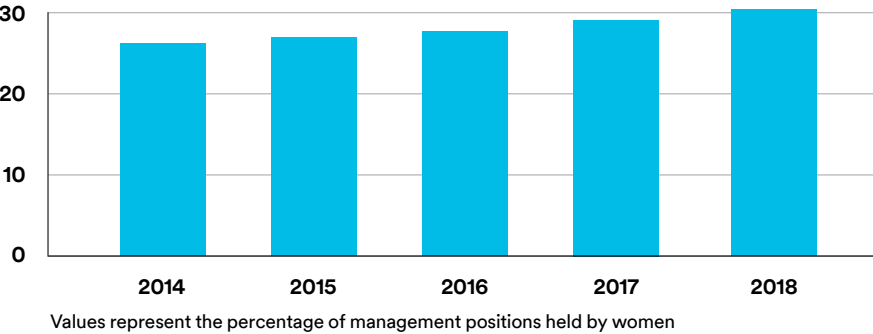
3M global female employees

Full and part-time



3M global females in management

Percentage of total



Looking forward

In 2019, we will continue to work toward our 2025 Sustainability Goal for employee participation in development by strengthening our “development for all” philosophy. One example: We’ll be launching a Data Analytics / Big Data University-type program, given this skill set has been identified as a development need across 3M.

We will also be continuing our work to meet employees where they are by offering more choice in how content is made available. For example, we’ll have both single-hour virtual sessions and multi-hour in-person workshops on the same topics — allowing employees with the time and interest to invest in an in-person session, and those with less time or a remote location to attend a condensed virtual program.

As we build 3M for the future, strengthening our culture is a top priority. At its core, culture is how we do things at 3M, and it belongs to all of us equally. As part of obtaining information or input on a topic, we are engaging our employees by broadening our listening strategies. In 2019, actions will be taking place on how 3M’s culture operates today and how it can and should operate in the future.

# Health and safety

All good things start with a safe and healthy working environment.

## Our commitment

As a company that makes a vast array of products designed to protect workers, 3M is front and center in the global effort to bring new science and innovation to workplace safety. At the same time, as an enterprise with 91,500 employees working around the world, we are always taking steps to further advance the safety of our employees.

3M is committed to helping improve the safety and health of people worldwide, so we can all focus on what matters most to us.

We also embrace this commitment for our own operations, and, to that end, will continue to take steps to further advance the safety of our most important asset: 3M employees.

## Employee safety and health

[The 3M Safety and Health Policy](#) applies to 3M operations everywhere, including new acquisitions. Hazards in 3M's workplaces must be well understood and effectively managed to protect 3M employees, visitors, locations, and surrounding communities.

In addition, in the spirit of continuous improvement, much is being done to evaluate opportunities to raise our safety standards. We visit locations to identify and manage environmental, health, and safety (EHS) risks; evaluate compliance to regulatory requirements and conformance to 3M policies and standards; identify opportunities for continuous improvement; and share exemplary practices among 3M auditable entities. Additional details on these efforts can be found in the [environmental management section](#).

To assure consistent reporting and metrics globally, 3M, like many multinational companies, follows the U.S. Occupational Safety and Health Administration (OSHA) recordkeeping rules and formulas to record and measure injury and illness rates worldwide. At all facilities within 3M's operational control, 3M employees and contingent employees are covered by our injury and illness recordkeeping rules.

## Contractor and visitor safety and health

3M requires all visitors, vendors, contingent workers, and contract workers at 3M locations to follow all applicable 3M workplace safety and health requirements. For example, contractors must complete a pre-qualification process before they may perform work on 3M premises. That process includes, among other things, reviewing the contractor's employee injury/illness rates, Experience Modification

Rates (EMR), employee training records, and safety committee activities. Contractor performance evaluations include safety reviews. Pre-construction safety reviews are conducted to address potential hazards and controls related to the work.

Each 3M location has a contract coordinator who is the main 3M contact for working with contractors on safety issues. The contract coordinator is empowered to participate in pre-bid meetings and pre-qualifications for contractors. He or she is on-site and therefore available for contractor meetings and safety reviews as necessary and appropriate.

Contractors are asked to submit notification to 3M of worker hours and any injuries occurring while performing work in accordance with a 3M contract. Any contractor incidents are reported in the 3M Worldwide Incident Management System (WIMS), including injuries and contractor worker hours. In 2018, a contractor fatality occurred as a result of injuries sustained from a fall while working at height. Additional preventive measures were implemented to further strengthen the safety of the operation.

## Process hazard management

3M is committed to rigorously managing the risks associated with hazardous processes, such as those with potential to result in catastrophic fires, explosions, and sudden release of toxic materials. We use a Hazardous Process Evaluation Tool (HazPET) to categorize hazardous processes. Process hazard analyses (PHAs) are used to assess the effectiveness of existing safeguards. Layers of Protection Analysis (LOPA) is also used in some instances to evaluate safety-critical devices and systems, providing more attention to independent protection layers. Facility sitting assessments help us identify and mitigate "maximum credible event" scenarios that could impact workers at some facilities, and a global initiative that builds on 3M's existing guidance to our facilities around effectively managing potential combustible dust hazards.

## Our actions

### Environmental, health, and safety (EHS) harmonization project

In 2018, 3M began laying the foundation for global harmonization of the company's EHS process, the EHS harmonization project. The goal of this continuous improvement project is to build consistency worldwide; standards, self-assessments, and software systems are being reviewed. For instance, software systems will be configured for consistency across all EHS functional areas, including the 3M Global Safety and Health Plan Tool (GSHP). Ultimately, the impact of this ambitious project should make all 3M EHS efforts more effective and efficient.

### Global safety and health plan tool

GSHP, which is part of 3M's EHS management system, is required to be implemented by global 3M locations. This approach utilizes a well-developed self-assessment process that is categorized into multiple elements addressing various



areas and standards related to safety and health. 3M utilizes a variety of tools to manage risks from hazards in the workplace. We’ve used specialized tools successfully for a number of years in the areas of process safety, industrial hygiene, and ergonomics. Each of these disciplines uses a risk management approach to categorize hazard levels and define appropriate levels of control.

As part of our continuous improvement efforts, in 2018, GSHP elements were incorporated in the new EHS harmonization project.

Culture of excellence pilot

In the first quarter of 2018, an initiative was launched at 24 3M facilities globally to drive a stronger culture of excellence in EHS. The project touches on the following key areas of EHS organizational performance:

- Leadership and employee engagement
- Standardized work practice observations
- Recognition of exemplary work practices

- Identification and investigation of potential hazards

Development and enhancement of tools to readily capture the key areas above has begun. A companywide rollout of the program will begin in 2019.

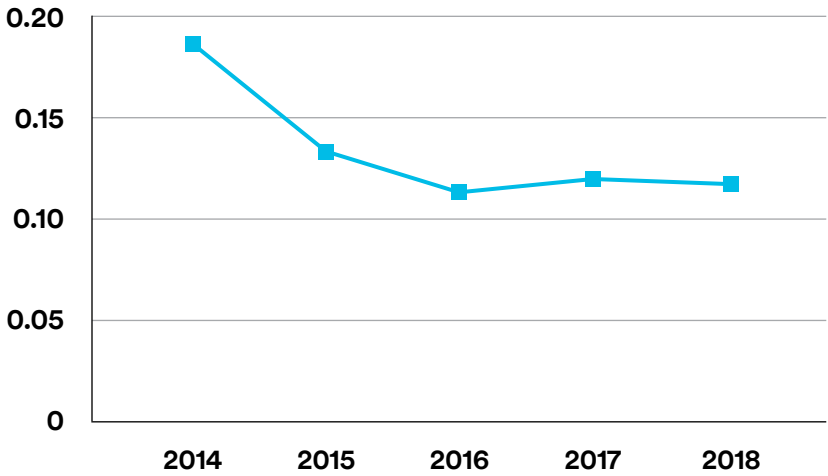
Significant injury/illness and fatality (SIF) rates

At the end of 2018, over 93,000 risk assessments had been completed, which resulted in the identification and reduction of

risk associated with more than 27,000 higher-hazard activities.

Since 2012, the SIF rate has seen a net reduction of 42.1 percent. This represents significantly fewer injury/illness incidents per year. The following chart shows the worldwide SIF rate trend for all 3M employees, contingent workers, and contractor workers combined.

3M global serious injury/illness incident (SIF) rate  
Total 3M, contingent, and contractor employees



Ergonomics risk management

3M’s Ergonomics Risk Reduction Process (ERRP) is a global, comprehensive program that integrates ergonomic job analysis and engineering design criteria to reduce exposure to commonly identified musculoskeletal disorder (MSD) risk factors. To accomplish this, we apply ergonomics risk assessment tools globally to identify and assess ergonomics risk in the industrial environment.

Online ergonomic training is also available 24/7 to any employee who wants to learn more and has access to the 3M intranet. All of these efforts have paid off in reduced numbers of ergonomic recordable injury cases; see recordable incident rate chart.

Industrial exposure risk management

To accurately assess exposure management programs and activities, 3M uses the comprehensive approach outlined by the American Industrial Hygiene Association (AIHA). In the past decade, over 95 percent of all chemical agents

and noise baseline exposure risk assessments have been completed for all jobs. As prescribed by our Global Safety and Health Plan, we have also conducted proactive assessments of dermal exposure, engineered nanoparticles, hazard communication, personal protective equipment, respirator protection, and ventilation. These assessments help us determine whether any changes in exposure management programs are warranted.

Radiation protection

3M’s Corporate Radiation Protection and Compliance group (CRPC) provides hazard evaluations and develops and provides training for both radiation source users as well as facility radiation safety officers to help protect 3M employees, our customers, and the public. This includes uses of radiation in both manufacturing and R&D; ionizing radiation sources such as radioactive materials and x-ray emitting devices; and non-ionizing radiation sources such as lasers, microwave and radiofrequency radiation, magnetic fields, and ultraviolet, infrared, and visible light. Annual program audits evaluate facility performance in managing hazards during routine use and maintenance of radiation

sources, security of radiation sources, training of personnel, and regulatory compliance.

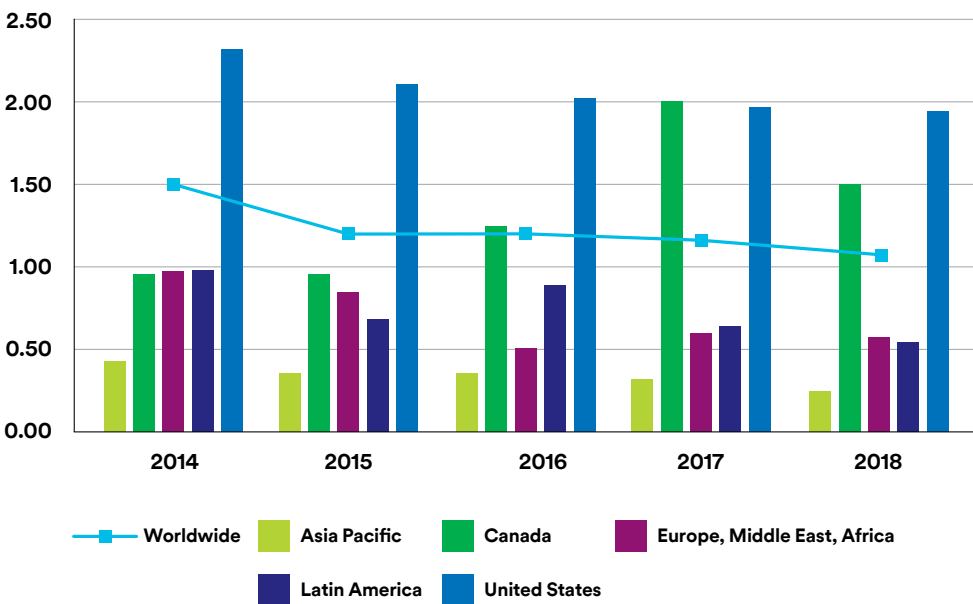
Global EHS team

3M’s global EHS team continues to evolve to its current operational state, which we believe sets us apart from our peers. Comprised of business-level EHS committee members, regional EHS managers, and corporate subject-matter experts, this committee will work with EHS facility staff globally to address and replicate best practices, solve problems, and drive worthy EHS initiatives to the operational level.

In 2018, 100 percent of 3M manufacturing locations worldwide had active employee safety and health committees.

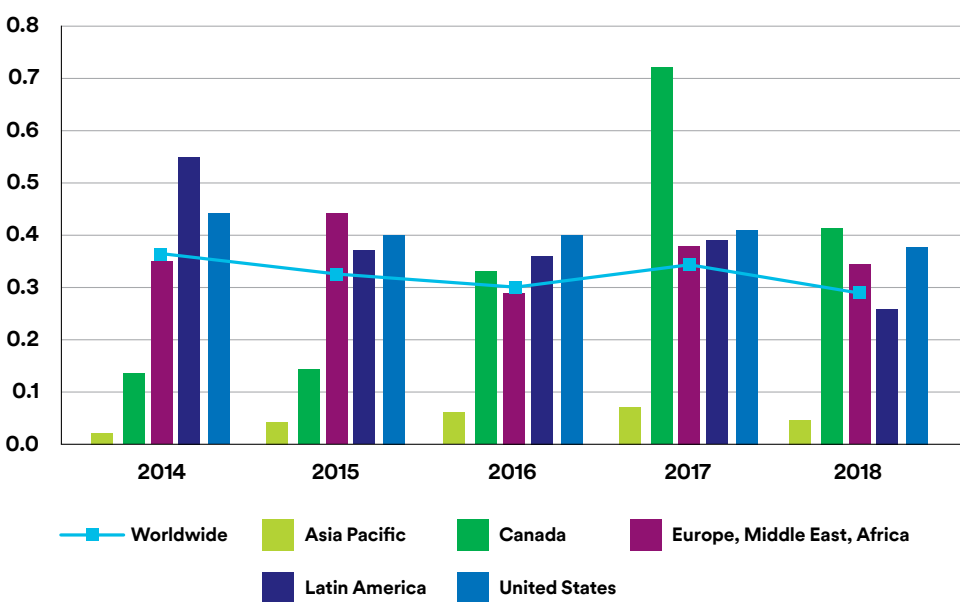
3M regional and global recordable incident rate

Per 100 3M employees (200,000 work hours)



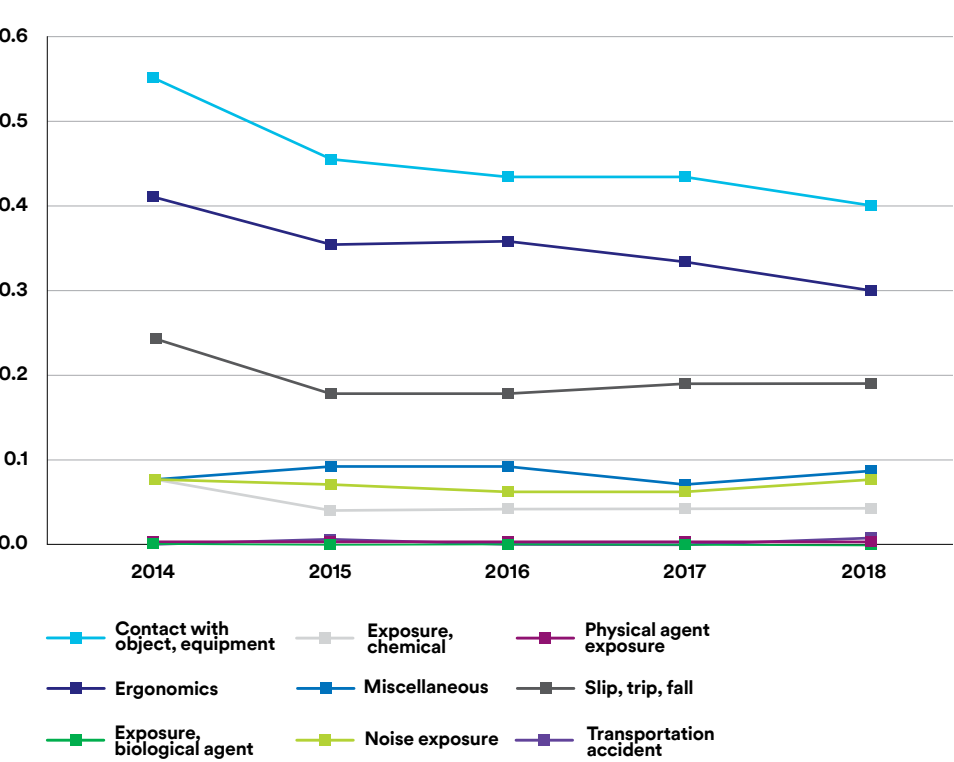
3M regional and global lost time incident rate

Per 100 3M employees (200,000 work hours)



3M global recordable incident rate category

Per 100 3M employees (200,000 work hours)



Looking forward

In the coming year, 3M will be working to define how the company can deliver the highest-quality, lowest-cost solutions to customers, with the shortest lead times in every market that we serve, in the safest and most sustainable way. Our EHS organization will be leading the charge to define exactly what “safe and sustainable” means, and how to get there.

2019 will also be year one for globally deploying the programs and technology that make up the new EHS harmonization project.

# Environmental management

Stewardship for the greater good.

## Our commitment

3M formalized its commitment to environmental stewardship when the company’s Board of Directors adopted the [3M Environmental Policy](#), in 1975. This policy established the framework for our approach to responsible environmental management and conservation of resources, emphasizing prevention of pollution at the source.

Since then, we have created supporting policies using a needs-driven process. When we identify potential risks to the environment, health, and safety of our employees, products, and communities, we take steps to modify processes and standards to address these risks.

3M’s strategies for sustainable development encompass the pursuit of customer satisfaction and commercial success within

a framework of environmental, social, and economic values. We are committed to complying with all applicable environmental requirements worldwide. Beyond compliance, the company continues to make significant investments to reduce the environmental footprint of our operations and our products with sustainable attributes to help customers reduce their environmental footprint and help meet their Sustainability goals. Always, 3M believes environmental policy and regulations should be guided by science-based decision making.

## Our actions

Setting and implementing global environmental policies, management systems, and key performance metrics enables 3M to continually integrate and drive environmental stewardship in our business groups globally, assuring consistency and innovative

environmental thinking. As reflected by our environmental performance indicators and [2025 Sustainability Goals](#), environmental stewardship is a core corporate commitment backed by decades of proven performance.

## Management

3M’s Environmental Management System (EMS) framework provides structure and consistency for overseeing daily activities, and puts the company in proactive, rather than reactive, mode regarding its environmental focus. We have extensive global systems in place to identify, track, and manage relevant information on corporate-wide environmental management and performance. This includes covering a full range of environmental compliance and operational performance metrics relevant to 3M operations, some of which are provided in this report.

Quarterly scorecards report data at the facility, division, business group, and corporate levels. Scorecards are reviewed by executive management for performance on selected indicators, enabling 3M to monitor and identify successes, risks, and opportunities for performance improvements and footprint reductions worldwide.

## Environmental, health, and safety incident management

Since 2010, all 3M locations globally are required to internally report environmental exceedances, spills, agency notices, and fines through one dedicated system — 3M’s Worldwide Incident Management System (WIMS).

WIMS has led to continuous improvement related to increased awareness of responsibilities, understanding of the holistic system, and more consistent reporting requirements for 3M’s global operations.

## Environmental investments

In 2018, 3M expended about \$27 million for capital projects related to protecting the environment. This amount excludes expenditures for remediation actions relating to existing matters caused by past operations that do not contribute to current or future revenues, which are expensed. Capital expenditures for environmental purposes have included pollution control devices — such as wastewater treatment plant improvements, scrubbers, containment structures, solvent recovery units and thermal oxidizers — at new and existing facilities constructed or upgraded in the normal course of business. Consistent with the company’s emphasis on environmental responsibility, capital expenditures (other than for remediation projects) for known projects are presently expected to be about \$75 million over the next two years for new or expanded programs to build facilities or modify manufacturing processes to minimize waste and reduce emissions.

## Environmental management implementation

Implementation of our EMS continues to increase throughout the world.

Our approach calls for each site to establish, implement, and maintain documented environmental objectives and targets. When establishing an EMS plan, each 3M location must address financial, technological, operational, and business considerations. The objectives and targets should be measurable and consistent with our environmental policy, including our commitments to prevent pollution and comply with applicable regulations and other requirements.

3M’s multifaceted strategy for implementing EMS and global auditing of environmental compliance for our operations is key to understanding any potential gaps and gaining resolution quickly.

All manufacturing locations, and new acquisitions based on their integration progress, are required to complete a Global Environmental Management Self-Assessment (GEMSA) at least annually. GEMSA



elements reflect procedures, systems, and processes that are comprehensive and mandatory to maintain compliance with legal or other requirements. Additional ISO 14001 elements and associated questions are provided to enable sites to conduct further review of their EMS. Data from the assessments are validated through audits, site visits by subject-matter experts, and other data systems.

Beginning in 2019, GEMSA will become part of the 3M EHS harmonization project, which has been designed to bring more consistency to environmental, health, and safety assessments at 3M facilities worldwide. Additional information on the 3M EHS harmonization project can be found in the [health and safety section](#).

### Environmental site assessment

Outside 3M’s EMS and GEMSA, 3M has completed environmental site assessments at most locations, with the goal of identifying potential historical liabilities. Because of these assessments, we can identify these biodiverse areas. Where applicable, 3M conducts searches of public databases, which includes

a wetland database. Site visits also identify areas such as rivers, creeks, and potential wetlands that are on or near the location.

We conduct additional biodiversity assessments during our annual evaluation, utilizing the definitions and tools established by the World Business Council for Sustainable Development (WBCSD) to screen the company’s various uses of water. Additional details on this process can be found in the [water section](#).

### Applying ISO 14001

The ISO 14001 Environment Management System (EMS) standard is an internationally recognized approach for managing the immediate and long-term environmental impacts of an organization’s products, services, and processes. In 2018, 3M continued working with an outside consultant to help individual locations learn how to transition and recertify to the latest version of this standard, which was established in late 2015. 3M completed timely recertification of all relevant sites to the updated ISO 14001 standard by year end 2018.

To help facilities comply with the new standard, 3M provides

training modules in our Global Learning System. The modules are used by learning coordinators to create courses, manage learner roles, process certifications, and run reports; by learners to search for courses and launch e-learning classes; and by supervisors to view the learning activities of their direct reports and to pre-book courses.

All together, our ISO 14001-certified locations account for approximately 92.3 percent of 3M’s total product output.

### Third-party assurance of Sustainability metric reporting

Bureau Veritas (BV) provided independent third-party verification of 3M’s 2018 environmental data (volatile organic compound emissions, water, waste, environmental compliance metrics, energy consumption, and greenhouse gas emissions) included in this 2019 Sustainability Report. For additional information on our third-party assurance, see [Bureau Veritas’ Assurance Statement](#).

### Facility self-assessments and auditing

3M verifies regulatory compliance and alignment with prioritized sections of the self-assessment, conducting environmental-related audits on a risk-prioritized basis. In all, our EHS facility audits covered sites that manufactured 32.6 percent of sales value of production (SVOP).

Key objectives of audits:		
Managing global risk and compliance		
Maintain compliance	Develop environmental professionals	Manage risk
Share best practices	Identify common areas for improvement	Build common understanding of requirements

### Comprised in the auditing process:

- The frequency of environmental compliance audits on manufacturing, distribution, and laboratory operations is based on relative risk
- At least annually, all global operations are assessed against a variety of criteria to establish a prioritized list of locations for compliance auditing
- 3M uses a variety of tools and resources for compliance auditing, including:
  - Internally developed compliance protocols created by subject-matter experts in regulatory programs and 3M processes
  - 3M’s GEMSA as an evaluation tool
  - Externally purchased compliance protocols, especially for operations outside the United States, to assure local compliance obligations are understood and met
  - Internal environmental compliance experts from around the company
  - External environmental consultants, as needed, to provide additional expertise and third-party verification of our auditing protocols
  - Complete and robust documentation of audits

- Findings, with assignments of responsibility, due dates for closure, and tracking to completion
- Detailed reviews of findings to assure corrective actions are complete

3M’s EHS auditing program is audited periodically by 3M’s Corporate Auditing Department.

All EHS auditors, except for 3M EHS professionals who are guest auditors, are required to take a certification test. 3M EHS professionals are assigned to an audit team or lead auditor to provide support on the auditing process and/or a specific subject during the audit.

Compliance analysis, documentation, and verification

In an effort to create more consistency in global auditing of locations, 3M has refined its Compliance and Auditing Management and Metric Systems (CAMMS). Primarily focused in the U.S. and Canada, CAMMS is a system for maintaining environmental compliance documents and determinations. It allows us to conduct internal compliance audits in the

context of applicable regulatory requirements and company policies and standards through the use of CAMMS dynamic audit checklists. In addition, CAMMS utilizes a risk assessment tool for prioritizing resources to implement corrective actions.

EHS professional training

As part of our ongoing training efforts, in 2018 3M conducted monthly webinars for environmental, health, and

safety management employees on topics that draw global interest. The webinars were recorded and placed on a website that allows convenient access for those who couldn't attend the live events. A wide range of topics were covered, including environmental auditing, agency compliance inspection, air emission modeling, and specific waste management procedures.

Commitment to PFAS stewardship

PFAS are a family of chemical compounds made up of two essential elements – carbon and fluorine. The carbon-fluorine bonds are exceptionally strong and stable even at high temperatures. They represent a broad class of compounds with many applications of industrial and social significance, including health care, advanced electronics, and replacement of materials with high global warming potential.

3M is constantly and proactively examining the environmental impact of our products. And, as the science of PFOS and PFOA progressed, we learned that these chemistries had the potential to build up over time. As part of our commitment

to environmental stewardship, in May 2000, 3M made the decision to phase-out of certain PFAS compounds, including PFOS and PFOA. We chose to stop production ahead of any regulatory requirement to do so and we shared our learnings with the EPA and our competitors.

3M is committed to responsible environmental stewardship and protecting natural resources. We work with federal, state, and local authorities regarding environmental aspects of our operations and are dedicated to acting with integrity in the way we treat our customers and the way we treat the environments in which we operate.

Globally, 3M has invested more than \$625 million on research, technology, and cleanup efforts related to PFAS. More than \$50 million has gone toward installing carbon filtration systems for drinking water sources. More than \$100 million has been invested in testing water sources around the country to better understand the quality of both groundwater and drinking water in communities.

Additionally, in 2018, 3M worked with the state of Minnesota to establish the 3M Grant for Water Quality and Sustainability Fund.

This \$850 million grant aligns with our commitment to improving lives through science and protecting the environment. The grant prioritizes investments in drinking water quality, groundwater recharge, and habitat improvement in the state of Minnesota.

The Grant is managed by the Minnesota Pollution Control Agency (MPCA) and the Department of Natural Resources (DNR) through a Working Group. 3M is a member of the Working Group but the MPCA and/or the DNR have ultimate responsibility to determine the projects to be implemented.

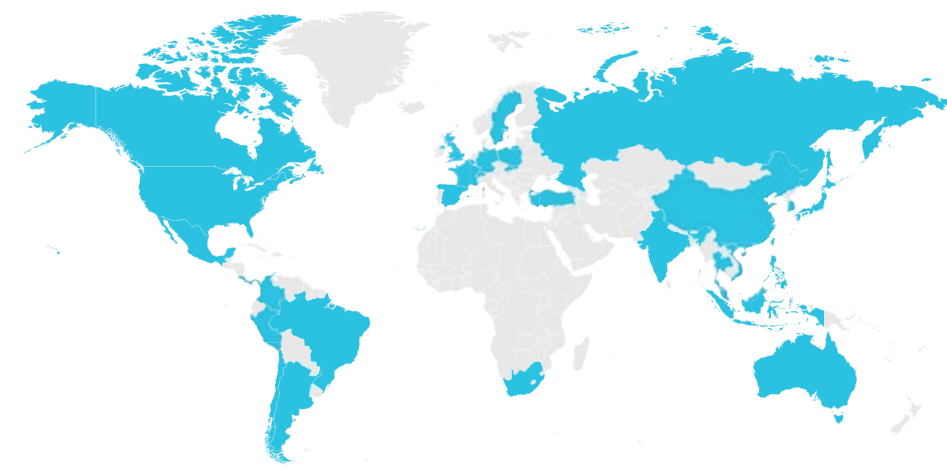
To learn more, visit [www.pfasfacts.com](http://www.pfasfacts.com).

Looking forward

We will continue to drive environmental management programs across all our global manufacturing facilities. Starting in 2019, we will be globally deploying the programs and technology that make up the new EHS harmonization. We will also be implementing new global standard work and supporting tools in WIMS to put best practices in place across the globe for EHS management.

Beyond EHS management, we are committed to PFAS stewardship and in the future, we will continue to lead on the issues of science and stewardship around PFAS. Our activities are centered in three areas: 1) limit the footprint of PFAS on the environment, including our decisions to phase out the production of PFOA and PFOS and several product categories, well before other manufacturers; 2) continued investments to remediate any contamination from our manufacturing facilities around the world; 3) continued investments in novel solutions to capture and recycle materials from our waste streams. As with many of our other products, we have dedicated significant resources to study PFAS and continue to develop and share the science behind PFAS through internal research, external collaborations with universities, and interactions with government regulators.

3M EHS audit locations, 2013-2018



# Raw materials

## Circular economy solutions help us do more with less.

### Our commitment

The world’s population is growing larger, living longer, and consuming more — which puts a strain on finite natural resources. To address this challenge, 3M continually looks for ways to recover, reuse, and recycle by-products and other waste material. We are moving from recyclable to renewable materials in our product and package design. Improving our raw material usage through product design and operational considerations provides cost benefits throughout our supply chain, in material use, energy, and transportation efficiency.

The [3M Waste Management Standard](#) applies to all 3M locations and provides a framework for managing all waste types from the time of generation until reused, recycled, treated, or disposed. The standard sets a baseline for several

core waste program elements and encourages waste minimization and recycling whenever possible. Per the standard, each 3M location has a waste management coordinator who is responsible for coordinating appropriate waste training for all personnel. Compliance with all 3M and other regulated waste requirements is evaluated through the internal environmental auditing program.

Our [Disposal of Chemical Waste Standard](#) calls for appropriate management and disposal of chemical waste to manage risks and protect the environment. This includes efforts to reduce the amount and hazards of waste materials generated, to recycle or reuse those materials whenever practical, and to control waste disposal through final disposition.

### 2025 Goal: Reduce manufacturing waste by an additional 10 percent, indexed to sales.

We’ll continue to drive “zero waste” thinking with our product designs and process technologies, as well as material reduction work at our manufacturing operations. Our definition of manufacturing waste for this goal includes materials sent to incineration and landfill.

3M Corporate Environmental Operations identifies opportunities for efficiency improvement and measures progress toward raw material usage and waste reduction goals for locations within our global manufacturing footprint. The results and raw data are used to identify, quantify, and prioritize projects to improve, utilizing Lean Six Sigma (LSS) methodology.

Within each region, business, and division, results are reviewed quarterly and annually against goals and tracking metrics. Specialized teams work on a variety of projects and programs, ranging from basic office recycling to more complex projects such as developing and capturing intrinsic waste materials generated off a manufacturing line. Through an evaluation process, all aspects of material reduction benefits or risks are reviewed.

### 2025 Goal: Achieve “zero landfill” status at more than 30 percent of manufacturing sites.

In addition to our waste reduction goal, we plan to increase repurposing, reusing, and recycling of potential waste materials to divert from landfill disposal.

A location receives “zero landfill” status when it has gone a full calendar year without sending any waste to a landfill. It will continue to be a zero landfill location as long as no manufacturing operations waste is sent to a landfill. Waste, as defined here, does not include ash generated from 3M material sent to

a waste-to-energy or incineration location controlled by a third party.

### Our actions

We have decreased our waste indexed to net sales by 32.4 percent since 2005.

In 2018, we continued with our company-wide strategy on reuse, reduction, and internal recycling, as well as collaboration with our own technical community, channel partners, and civic and conservation leaders in communities where 3M operates.

3M’s waste metrics include 3M manufacturing operations with total output greater than 4.54 metric tons per year (10,000 pounds), which represents 99 percent of sales value of production (SVOP) of our manufacturing locations. Composting materials from our manufacturing operations is an extremely small component of our manufacturing operations.

3M practices material minimization whenever practical to reduce the number of by-products generated and to reuse, recycle, or create energy from as much of the remaining material as possible.

Between 2015 and 2019, 3M has reduced the amount of material sent for landfill and incineration by 11.7 percent, indexed to net sales.

3M is also dedicated to operating in accordance with all regulations and managing waste materials safely and responsibly. All 3M locations are required to manage all returned, recycled, and waste materials from the time of generation until reused, recycled, treated, or disposed.

### Maximizing beneficial use of raw materials

Raw material usage is a measurement of overall product and process yield throughout our manufacturing processes and is a key metric for 3M. It is indicative of operational excellence in our product design and manufacturing processes. Our raw material usage includes the product, the process, and all by-products.

The diversity of manufacturing technologies, processes, and products at 3M provides opportunities for creative surplus material solutions for the company. Accurate identification and characterization of those materials is a continual education process and



provides a foundational opportunity to further advance minimization and recycling at all our locations. One business’s surplus material, for example, may be another business’s raw material. As we continue to grow internationally, integrating consistent, yet resourceful, surplus material management practices in accordance to 3M standards remains a key objective.

As such, we continually look for ways to recover, reuse, and recycle by-products and other surplus material when feasible. And when it’s not, recoverable, reusable, or recyclable, we responsibly dispose of waste materials. The concept of maximizing beneficial raw material use is important both internally and externally to address the global challenge of resource efficiency and scarcity.

Zero landfill

Zero landfill is a goal that resonates with our local communities as well as our suppliers and customers. However, it has various definitions for different people and locations. We’ve spent a lot of time during our goal development process benchmarking peer companies that span relevant business sectors and

industries. We’ve chosen a holistic definition: Zero landfill means no by-product is sent directly to a landfill from a 3M manufacturing location in a calendar year.

Our location waste data are reported in a corporate database quarterly. This data is third-party validated at select locations and at the corporate level. We also require locations seeking this status to complete an internal assessment to assure accurate reporting.

By the end of 2018, 30.8 percent of 3M locations had attained zero landfill status.

We have multiple ways to meet our 2025 zero landfill goal, including product and process optimization, onsite and offsite recycling, composting, and waste-to-energy practices. As we monitor progress toward this goal, facilities listed will change due to operations (for example, facility closures, acquisitions, and sites missing zero landfill by one day of the year). To read how one plant became zero landfill, [go here](#).

Operational material management

A significant amount of effort in 2018 focused on improving and evolving our Global Environmental Management Self-Assessment (GEMSA) program, which is now a core element of our EHS harmonization project. This program helps drive continuous improvement in EHS performance. Requirements were added for all sites to identify and implement projects to meet their internal goals for waste and water reduction. See additional information on the [EHS harmonization project here](#).

3P (Pollution Prevention Pays)

An industry first in 1975, the 3M Pollution Prevention Pays (3P) program is based on the belief that a prevention approach to pollution is more environmentally effective, more socially acceptable, and more economical than treatment. In the last 44 years, the program has prevented more than 2.5 million short tons of pollutants and saved over \$2.2 billion based on aggregated data from the first year of each 3P project.

As part of the program, select projects are honored based upon their exceptional achievement. Some highlights include:

In 2018, 3M Personal Safety Division was recognized as division of the year along with 3M China as country of the year.

Using kaizen events to improve flow of process streams

Kaizen is the Japanese word for “continuous improvement.” In 2018, in a continuation of previous efforts, 3M EHS conducted several kaizen events, including facility walk-throughs, waste-by-cause analyses, and identification of circular uses for surplus materials. With our learnings from these events, we developed a Lean Six Sigma (LSS) Sustainability Tool Kit with templates and examples for replication across the company.

Part of the solution requires utilizing LSS within a location to segregate and manage material flow for material streams and analyze the availability of internal and external by-product handling alternatives.

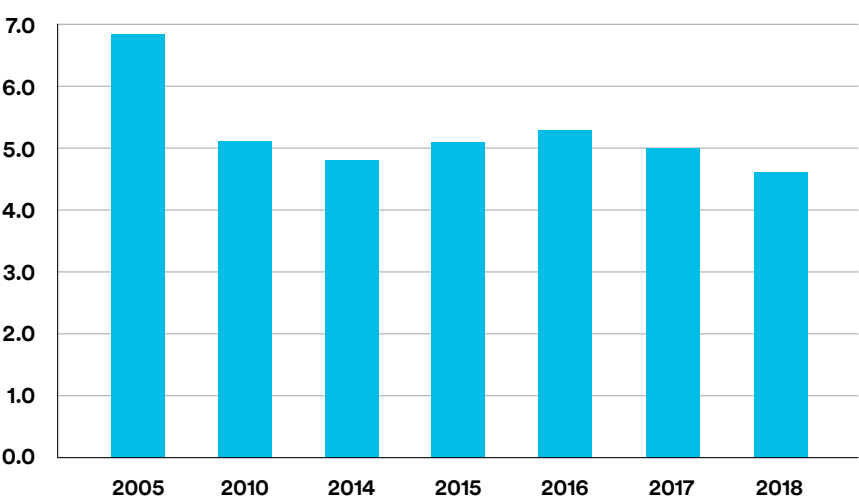
As locations identify opportunities to divert material streams, we protect 3M’s reputation while managing by-product, and set up contracts with our haulers, recyclers, and waste-to-energy companies to confirm that our material is handled appropriately.

Aligning with Business Transformation

Driving continuous improvement in surplus materials management has been a multifaceted effort at 3M. In addition to LSS, which helps us gain a better understanding of all the components involved and the total cost of materials, our Business Transformation platform and our global enterprise resource planning system bring visibility to each manufacturing location’s by-product. This allows facilities to better use LSS tools to identify and prioritize projects, and ultimately reduce waste.

Global waste

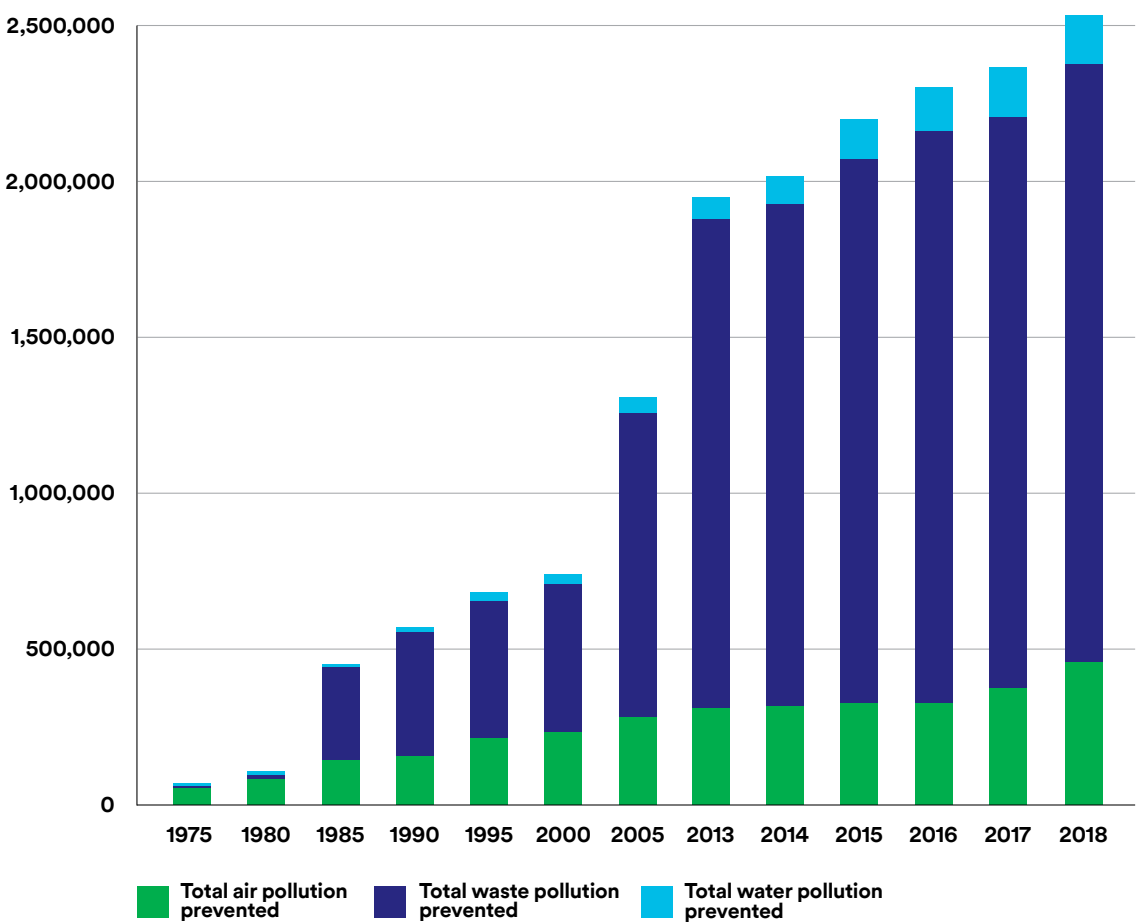
Metric tons per MM \$USD net sales



Starting in 2016, waste no longer includes waste-to-energy.

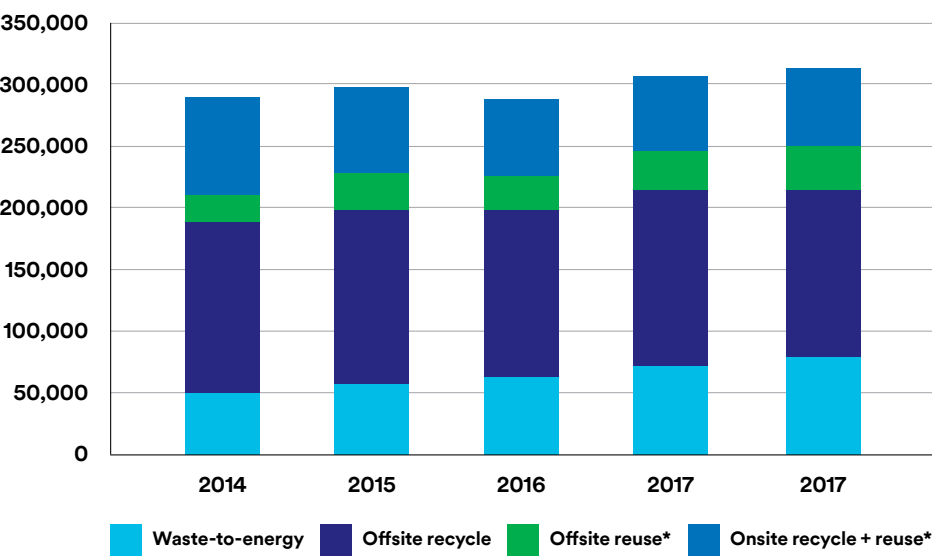
3P global pollution prevention achievements: 1975-2018

First year total pollution prevention cumulative totals, short tons



Global waste diversion by type

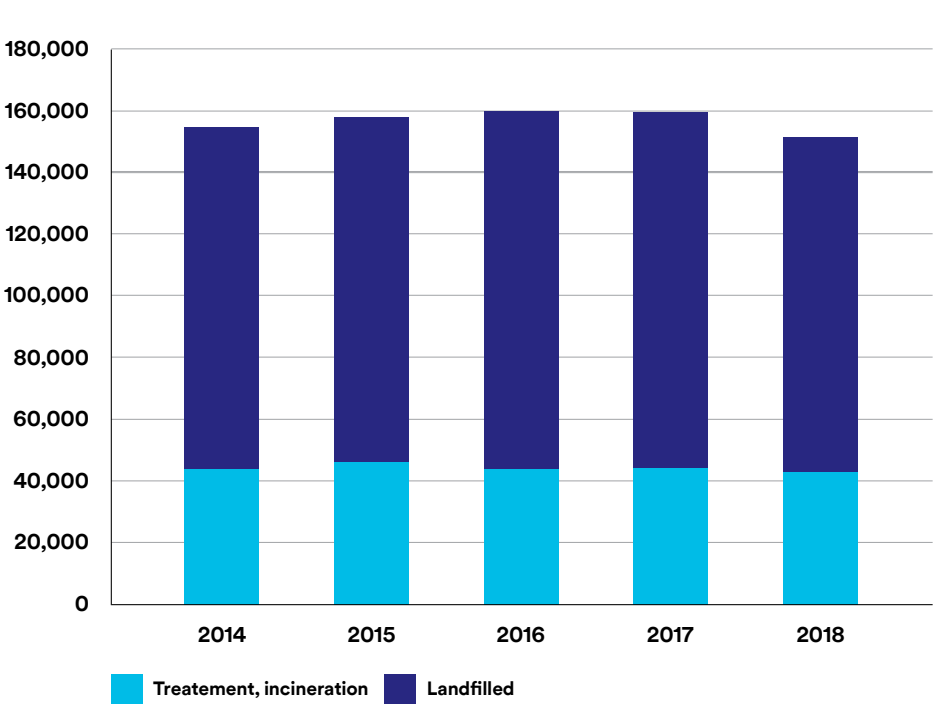
Metric tons



\*Does not include onsite recycle & reuse and offsite reuse from 3M's industrial mineral product (IMP) division.

Global waste by disposal type

Metric tons



Starting in 2016, waste no longer includes waste-to-energy.

Looking forward

As we look ahead toward a more circular economy, 3M is focusing on initiatives that will help us engage more of the value chain. We're looking to maximize product output and reuse waste in other locations, processes, and products. In addition, we are working with our researchers to create products to assure the effectiveness of raw materials. We're also identifying and testing technologies that make our processes more efficient.

Plans are also underway to expand the scope of the successful 3P program. We're adding the ability to track 3P projects from the idea generation phase through project planning, execution, completion, and award recognition. This will provide business leaders visibility to barriers that may jeopardize the success of footprint reduction projects, and assure the largest opportunities are addressed.

3M, with our scientists and technologies, is uniquely positioned to lead the advancement of circular solutions.

# Water

## Giving Earth’s most valuable natural resource the attention it deserves.

### Our commitment

Applying 3M technology and working together, we have the strength to bring real, lasting improvements to water availability and quality on a global scale.

Water is the most valuable natural resource on our planet — supporting billions of plant, animal, and human lives and helping ecosystems thrive. Our consumption of this resource must be accordingly nurtured and thoughtfully managed. We recognize that reducing water consumption in our operations and improving water quality are important elements of optimizing our environmental stewardship. Quantitatively, the availability of water must meet the needs of current and future consumer demands. In addition, working to exceed local, state,

and federal regulations with an eye toward the future.

Water is an important component for the manufacturing and support systems of several of our products. Because of this, 3M continues to actively understand, manage, and work toward reducing our corporate water footprint while providing innovative solutions to our customers.

We respect our ecological and ethical responsibility and have a vested interest in preserving and improving water availability and quality in the communities we serve and beyond.

[3M’s Water Stewardship Standard](#) outlines our commitment to water resources that secure social equity, economic growth, and environmental protection. Water resources include water intake, effluent water discharge, and rainwater.

### 2025 Goal: Reduce global water use by an additional 10 percent, indexed to sales.

3M operations must manage their water resources through alignment with regulatory requirements, conservation, and reuse, and reporting of water usage internally.

### 2025 Goal: Engage 100 percent of water-stressed/scarc communities where 3M manufactures, on community-wide approaches to water management.

3M will partner with local communities to advance water recycling and conservation. Ultimately, we aim to help these communities build and manage their own clean water efforts into the future.

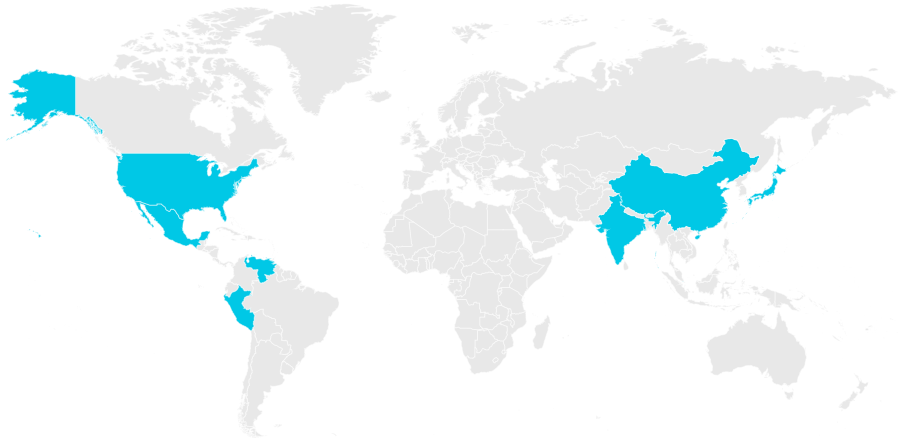
### Risk-mitigation planning

At 3M, we continually evaluate our approach to opportunity and risk. We believe the whole concept of risk management is an essential component of strategic planning. This includes a broad risk oversight by the 3M Board of Directors and its committees, with committee-level risk analyses reported to the full Board and executive-level internal auditor and Chief Compliance Officer appointed by, and reporting directly to, the [Audit Committee](#).

3M uses the definitions and tools established by the World Business Council for Sustainable Development (WBCSD) to screen the company’s various locations and their water use with validated WBCSD water availability, population, and biodiversity information both on a country and watershed basis. In 2018, 25 sites with annual water use equal to or greater than 1,000 cubic meters were in water-stressed areas as defined by the extremely high baseline water stress value, according to the WBCSD-Global Water Tool.™

Each 3M site located in a water-stressed area is required to understand its water use, the associated business risks and impacts, and to work with local water resources to understand potential impacts on the surrounding area. It is also requested that those sites do water conservation planning, outlining current and future water conservation efforts. Annual stress-level screening evaluations are conducted for global operations using available updates from the water tool, an analysis of site operations, and water usage and local conditions.

### 3M locations in-scope for the 2025 Sustainability water-stressed/scarc communities goal



- United States (11)
- Mexico (five)
- Peru (one)
- Venezuela (one)
- India (two)
- China (two)
- Singapore (two)
- Japan (one)



# Our actions

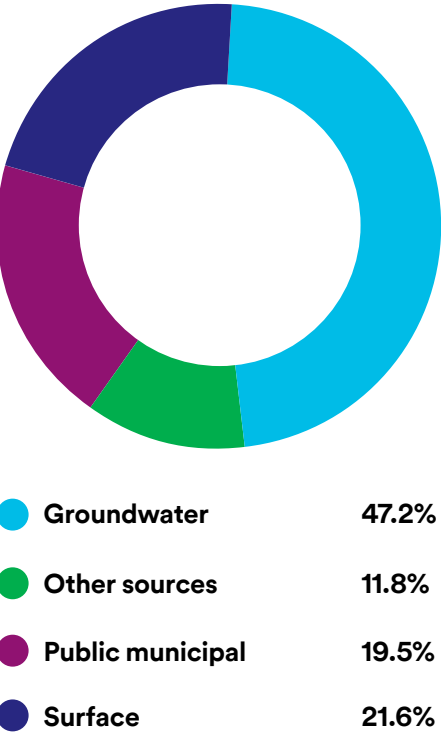
We are continually evaluating our water use footprint with a consistent, company-wide focus on reuse, reduction, and internal recycling, as well as collaboration with our own technical community, channel partners, and civic and conservation leaders in communities where 3M operates.

3M’s total water usage includes sanitary, process, heating, cooling, remediation, and miscellaneous sources. Water usage data are tracked and reported annually on a global basis for manufacturing sites that produce greater than 4.54 metric tons (10,000 pounds) of product per year. The reported data accounts for 99 percent of sales value of production (SVOP), which provides solid coverage of water use considered material to 3M’s operational environmental footprint.

Total water consumption has decreased 39.4 percent between 2005 and 2018 indexed to corporate-wide net sales. Results also indicate that the largest share of 3M water use in operations is for processing products in manufacturing and heating or cooling of those processes and associated operations. We continue to improve our data accuracy through monitoring and measurement.

Our water conservation efforts have been achieved through recycling, reuse, product redesigns, and improvements to our buildings and manufacturing processes. A majority of our water-intense manufacturing operations are located in the U.S. and Europe, in areas that are not water-stressed or water-scarce. However, they also contribute significantly to our conservation efforts. As the company continues to grow globally, thoughtful consideration is placed on the type of operations and availability of water sources.

Global water withdrawal  
2018 percentage



# Water conservation

In 2018, we continued to evaluate policies, programs, and procedures while expanding our global internal systems. We use those findings to create, identify, and share best management practices related to water conservation.

We are continuing our efforts to implement water reduction projects at targeted facilities while evaluating external partnerships.

As we have for decades.

Case in point: Tonawanda, New York. In 1946, two chemical engineers and a chemist came up with a process for making artificial sponges to take the place of natural sea sponges.

The problem, however, is that the process requires a lot of heat. Previously, this heat came in the form of steam, but a team of scientists at the 3M plant in Tonawanda came up with a way to make sponges that uses less water. They repurposed hot water that previously had gone to the sewer. That water is now used to heat up the process step before steam is used, and then it’s recycled back to the start of the process to be reused.

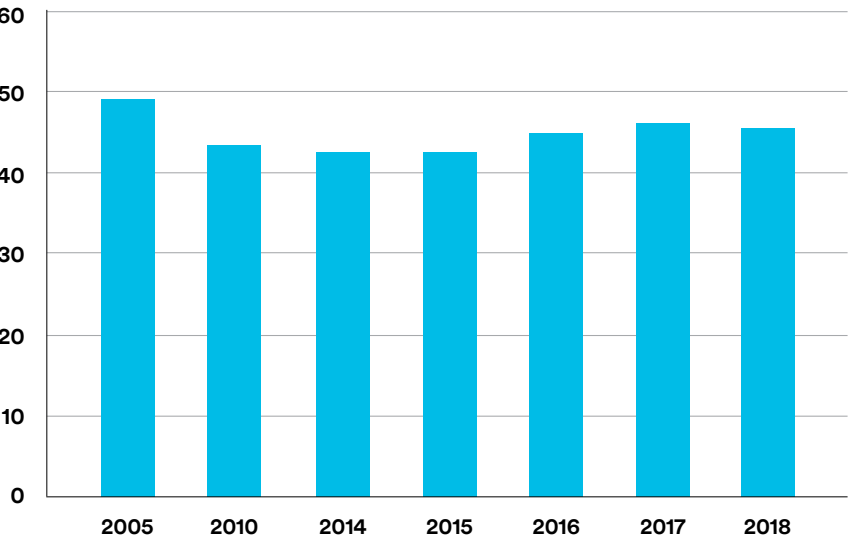
The new process has led to a 25 percent reduction in water usage at the Tonawanda plant. This also means less energy is consumed because less water has to be heated during the sponge-making process.

To learn more on 3M Tonawanda, go [here](#).

Another case in point: Bangalore, India. At the 3M plant here, toilet flushing, cleaning, and gardening were consuming potable water. Engineering and the EHS team at the facility worked together to identify and map areas where potable water could be replaced with recycled, non-potable water. A separate pipeline was created to deliver treated water for toilet flushing, floor cleaning, and gardening purposes. These steps, and others, produced an overall savings of 3,226,000 liters of potable water in the first year.

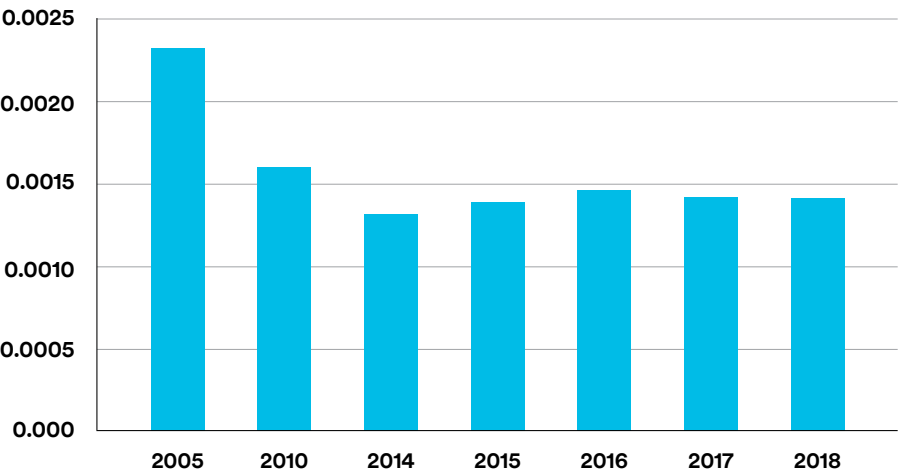
Global water usage

Million cubic meters



Global water usage

Million cubic meters per MM \$USD net sales



Looking forward

Water is a valuable natural resource for life and thriving ecosystems. Because of this, 3M continues to actively manage and work toward reducing our corporate water footprint while providing innovative solutions to our customers. Water will be part of our strategic focus on empowering Science for Circular, Climate, and Community.



# Climate and energy

## Taking innovative steps to decarbonize industry.

### Our commitment

Through the years, 3M has led industry in addressing both the challenges and the opportunities presented by climate change and energy conservation.

Our proactive leadership is best defined by five areas of action:

- Executive-level commitment to these important topics and our related principles, commitments, and risk-mitigation planning efforts
- Industry-leading efforts to reduce our own greenhouse gas (GHG) emissions
- Extensive public policy engagement on both climate change and energy conservation
- A decades-long track record of improving energy efficiency at our locations

- Serving our customers through a wide range of innovative products that help them improve energy efficiency and reduce their carbon footprints

### Executive-level commitment

We are committed to innovate to decarbonize industry, accelerate climate solutions, and reduce our own environmental footprint. This commitment was launched through our [Strategic Sustainability Framework](#) (Science for Circular, Science for Climate, and Science for Community), on Investor Day 2018, by Michael F. Roman, 3M’s Chief Executive Officer, and is rooted in our ambition to apply science for the greater good.

As a science-based company, 3M uses the World Resources Institute (WRI) / World Business Council for Sustainable Development (WBCSD) GHG Protocol Corporate Accounting and Reporting

Standard to set GHG emission reduction targets. For this reason, we are incorporating the findings of the Special Report on Global Warming of 1.5°C, published by the Intergovernmental Panel on Climate Change (IPCC) in setting our goals and actions.<sup>1</sup> This report, prepared by 91 authors from 40 countries and based on over 6,000 scientific references, finds that limiting global warming to 1.5°C (2.7°F) above pre-industrial temperatures would require “deep emissions reductions” and “rapid, far-reaching and unprecedented changes in all aspects of society.” Achieving this goal also would “reduce challenging impacts on ecosystems, human health and well-being.”

<sup>1</sup>Special Report on Global Warming of 1.5°C (Report). Incheon, South Korea: Intergovernmental Panel on Climate Change (IPCC). 7 October 2018.

### Public policy engagement

3M endorses voluntary approaches to GHG emissions management. Any mandatory GHG emission reductions should be developed through international negotiations and follow these policy principles:

- Apply broadly to countries or groups of countries, and GHG emission sources
- Be guided by science-based decision making
- Utilize a consistent, market-based approach
- Encourage investment and protect intellectual property to facilitate technology breakthroughs
- Include provisions for carbon emissions trading and/or alternative investment and compliance programs
- Provide full credit for early reductions in GHG emissions
- Balance multiple country-level priorities, including energy reliability and independence, national security, and economic growth and employment

- Include provisions that promote the efficient allocation of emissions reductions and assure all sectors contribute to reduction targets, with the effect of allowing fair competition and avoiding market distortions within industrial sectors or across national boundaries

3M is actively engaged in public policy development to address climate change concerns. For additional information, see the [global challenges section](#).

### Climate risk process

#### Risk-mitigation planning

Severe weather and long-term trends could affect 3M’s operations and supply chain. To address these and other risks, 3M maintains a systematic Business Continuity and Planning Process and Crisis Management Program which coordinates efforts of local crisis management teams maintained at each 3M location and international subsidiary.

Corporate and local plans take into account the risk of natural disaster, infectious disease, employee safety, protection of assets, customer service, and other business continuity requirements.

### Our climate risk process includes:

#### Governance

The Board has delegated primary responsibility for the oversight of risks facing the company to the Audit Committee. The 3M Company Board of Directors Audit Committee Charter states that the committee will “discuss policies and procedures with respect to risk assessment and risk management, the company’s major risk exposures, and the steps management has taken to monitor and mitigate such exposures.” For the purposes of discussing climate-related risks, “substantive financial impact” means an event or circumstance that would individually or in the aggregate have a material adverse effect on the consolidated financial condition or operations of 3M Company and subsidiaries and affiliates taken as a whole.



While the Board’s oversight of risk is primarily performed by the Audit Committee, the Board has also delegated to other 3M senior management committees the oversight of risks within their areas of responsibility and expertise. The Environmental, Health, and Safety (EHS) Committee of 3M senior management provides input on climate and environmental related risks.

Integration into enterprise risk

3M continually evaluates aspects of risk; our analysis has not identified all aspects of climate risk as an enterprise risk with a substantive financial impact. Our primary categories of enterprise risk are detailed in our [Annual Report](#). Additional details on our enterprise risk assessments can be found in the [enterprise risk section](#) of this report.

Timeframes

Short-term	Medium-term	Long-term
0-1 years	1-5 years	5+ years

Board’s oversight

3M’s Science, Technology, and Sustainability (STS) Committee assesses and advances strategic growth areas, long-term investments, and inspired innovation opportunities. Committee members as of December 31, 2018, include Inge G. Thulin, Executive Chairman of the Board; Michael F. Roman, Chief Executive Officer; Nicholas C. Gangstad, Senior Vice President and Chief Financial Officer; John P. Banovetz, Senior Vice President, Research and Development and Chief Technology Officer; Gayle R.T. Schueller, Vice President and Chief Sustainability Officer.

Frequency on Board’s agenda

Sustainability is a topic at all levels of our company. On an annual basis, our Chief Technology Officer and our Chief Sustainability Officer report directly to the Board’s Nominating and Governance Committee on our Sustainability efforts. In addition, throughout 2018 the STS committee met with increasing frequency as we created our new business strategy, known as our Strategic Sustainability Framework. This senior leadership team was highly engaged and

involved in its development and remains increasingly engaged in the resulting innovations and actions.

Corporate officer's oversight

In addition to members of the STS Committee, 3M’s Senior Vice President of Supply Chain, a direct report to the Chief Executive Officer, has the highest level of direct responsibility for assessing and managing climate-related issues. This person will carry on the company’s history of proactive leadership in addressing both the challenges and the opportunities presented by climate change and energy conservation.

Identification and assessment

Managing risk requires integrating a multi-disciplinary, company-wide risk identification, assessment, and management process.

Frequency of monitoring

3M will assess climate-related risks at least once every six months, and more often if a risk is considered to be more time-sensitive. Part of the assessment will be to evaluate risks that go beyond six years well into the future.

Risk factors

**Regulatory** 3M continually evaluates aspects of regulatory risk during regular business through new product development and continuous business improvement. 3M’s operations are affected by national, state, and local laws around the world. 3M has made, and plans to continue making, necessary expenditures for compliance with applicable laws. 3M is also involved in remediation actions relating to environmental matters from past operations at certain sites. Our analysis has not identified this climate factor as an enterprise risk with a substantive financial impact.

**Technology** 3M’s five business segments bring together common or related 3M technologies, enhancing the development of innovative products and services and providing for efficient sharing

of business resources. We have operations in over 70 countries, bringing together a combination of our 46 unique technology platforms to produce over 55,000 product lines in nearly every country. Any risks from technology would be identified and mitigated through our New Technology Introduction (NTI) process, New Product Introduction (NPI) process, and continuous improvement program.

This product diversity enables 3M to identify unique solutions to solve our customers’ challenges. In 2018, 3M invested \$1.82 billion in research and development to build upon our existing technologies to find innovative solutions for our customers’ challenges. This unique combination of diversity and investment enables 3M to remain on the cutting edge of science and support our customers’ future needs as the climate changes. Our analysis has not identified this climate factor as an enterprise risk with a substantive financial impact.

**Legal** The company’s future results may be affected by various legal and regulatory proceedings and legal compliance risks, including those involving product liability, antitrust, intellectual property, environmental, the U.S. Foreign

Corrupt Practices Act and other anti-bribery and anti-corruption laws, and other matters. The outcome of these legal proceedings is often difficult to reliably predict. For a more detailed review of this topic, see the discussion in Note 16 “Commitments and Contingencies” within the Notes to Consolidated Financial Statements in The Company’s [Annual Report](#) to Shareholders.

**Market** Results are impacted by the effects of, and changes in, worldwide economic, political, and capital markets conditions. 3M operates in more than 70 countries and derives approximately 60 percent of its revenues from outside the United States. The company’s business is subject to global competition and geopolitical risks and may be adversely affected by factors that are beyond its control, such as slower economic growth, disruptions in financial markets, economic downturns, inflation, elevated unemployment levels, sluggish or uneven recovery, government deficit reduction, natural disasters, and other factors in specific countries or regions, or in the various industries in which 3M operates. Our analysis

has not identified this climate factor as an enterprise risk with a substantive financial impact.

**Reputation** Around the world, customers rely on 3M to provide innovative solutions to advance companies, enhance homes, and improve lives. We are defined by more than just what we make — we are defined by how we do business: the 3M Way, always making the right choices for our company and our customers, and protecting our reputation in all we do. Our analysis has not identified this climate factor as an enterprise risk with a substantive financial impact.

**Physical (acute and chronic)** Every year, local crisis management teams at every 3M facility and international subsidiary must review and update its Crisis Management Plan to reflect current conditions. It also performs a tabletop or actual crisis response exercise. 3M Corporate Auditing and Corporate Security monitor facility compliance with the Corporate Crisis Management Program.

3M mitigates supply chain risks through a variety of management practices, including multi-sourcing raw materials, pre-qualification of potential outsource manufacturers,

and maintaining appropriate stocks of raw materials and contingency plans with key suppliers to assure allocation to 3M in the event of supply disruption. Our analysis has not identified this climate factor as an enterprise risk with a substantive financial impact.

**Upstream** 3M depends on various components, compounds, raw materials, and energy (including oil and natural gas and their derivatives) supplied by others for the manufacturing of its products. It is possible that any of its supplier relationships could be interrupted due to natural and other disasters and other events, or be terminated in the future. Risks from upstream suppliers are identified at the product level through the [New Product Introduction \(NPI\)](#) and continuous improvement processes at 3M. An on-site assessment may be conducted, by 3M or third party, and any deficiencies are ultimately corrected through a Corrective Action Preventive Action (CAPA) process. Our analysis has not identified this climate factor as an enterprise risk with a substantive financial impact.

**Downstream** Our analysis has not identified “downstream” as an enterprise risk with a

substantive financial impact. Risks from downstream product uses are identified at the product level through the [Life Cycle Management \(LCM\)](#) process at 3M, which evaluates the planned use and disposal of 3M products and identifies hazards and risks associated with the use and disposal of 3M products. Mitigation of these risks is highly diverse and product-specific. Our analysis has not identified this climate factor as an enterprise risk with a substantive financial impact.

**Financial risks**

At 3M, we continually evaluate our approach to opportunity and risk. We believe the whole concept of risk appetite and tolerance is an essential component of strategic planning. This includes broad risk oversight by the Board and its committees, with committee-level risk analyses reported to the full Board and executive-level internal auditor and Chief Compliance Officer appointed by, and reporting directly to, the Audit Committee.

3M has operations in over 70 countries, with a regionalized supply chain that enables more localized and diversified production of our products. This helps

reduce our risk from local climate impacts on our operations.

3M’s five business segments bring together common or related 3M technologies, enhancing the development of innovative products and services and providing for efficient sharing of business resources. Our operations bring together a combination of our 46 unique technology platforms to produce over 55,000 product lines, which are sold in nearly every country.

We believe this governance of risks by Board committees, who share information with the full Board, is appropriate for a diversified technology and manufacturing company like 3M. [3M’s 10-K, Item 1A](#), outlines risk factors applicable to the company.

**Financial opportunities**

Financial opportunities include products and services and resource efficiency. Access to dependable energy supplies and energy efficiency directly affect all businesses and communities. Energy usage and climate concerns require systemic change. 3M is a diversified technology company providing innovative solutions

to address these and other physical climate opportunities.

**Metrics**

We have established key metrics to measure and manage climate risk that go beyond compliance to thinking holistically about how our operations and products affect the world and every life in it. We report on historical periods to allow for trend analysis with a clear description of methodologies we use to calculate or estimate limitations and assumptions.

**Principles**

3M’s [2025 Sustainability Goals](#) and [Strategic Sustainability Framework](#) milestones.

**Relevance** Clearly define boundaries

**Completeness** Strive to calculate and report data coverage to 99 percent of inventory for Scope 1 and Scope 2 emissions. We will continue to develop and support advances in Scope 3 methodology

**Consistency** Base our data on approved methodology

**Accuracy** Develop corporate systems and auditing procedures

**Transparency** Report on emissions and activities in a way that is relevant to stakeholders

**2025 Goal: Improve energy efficiency indexed to net sales by 30 percent.**

Energy-efficiency improvements help reduce energy use, energy associated costs, and GHG emissions. 3M energy management goes beyond energy-efficiency efforts in factories and buildings: It is a team effort guided by 3M’s global [Corporate Energy Policy](#) and coordinated by the Corporate Energy Management team, with oversight by 3M’s Corporate Energy Manager and Engineering Vice President, and active support from the Chief Executive Officer.

3M has taken a broad approach to managing our energy footprint, which includes evaluating the impact of our new products, manufacturing processes, equipment, and locations, as well as reducing the energy footprint of our existing manufacturing and administrative locations. In addition,

we actively share information about our energy management program with external stakeholders such as suppliers, customers, and other interested organizations.

**2025 Goal: Increase renewable energy to 25 percent of total electricity use.**

Achieving this goal will mean adding nearly 800,000 MWh of renewable energy use globally. The primary sources of this renewable energy will be wind and solar.

**2025 Goal: Ensure GHG emissions at least 50 percent below our 2002 baseline, while growing our business.**

3M is in a leadership position due to our early actions to reduce our GHG emissions, which started in 2000. We are committed to continuing that leadership even as we grow the company in order to help our customers address the issue of climate change.

By conserving energy, reformulating products, and prioritizing opportunities, 3M has been able to achieve industry-leading GHG emission reductions. Other companies are setting goals to move closer to the achievements we have already realized.

**2025 Goal: Help our customers reduce their GHGs by 250 million tons of CO<sub>2</sub> equivalent emissions through use of 3M products.**

While 3M has made significant GHG emission reductions across our global operations, we realize we can make far greater contributions by helping our customers reduce their GHG emissions through the use of our products. For additional information on how we work with our customers, see [Our Customers](#).

**Our actions**  
**Energy management, inside and out**

3M reviews its Strategic Energy Management Plan annually to prioritize programs and meet global goals. The plan uses input from stakeholders, including manufacturing directors, plant managers, operations employees, and executive management. Goals of the plan include to continuously improve results, leverage engineering expertise and advances, drive facility-level efficiency improvements, maintain top management support, and protect 3M’s reputation.

Public speaking engagements and partnerships are integral elements of the plan. In 2018, 3M experts spoke at several energy industry conferences, including the Association of Energy Engineers (AEE), the Western Electricity Coordinating Council (WECC), the U.S. Department of Energy (DOE’s), and the Better Buildings Summit. We are also one of 30 businesses and organizations that have formed the Minnesota Sustainable Growth Coalition, which is dedicated to defining and achieving a fully realized circular economy.

**A focus on energy from naturally replenishable sources**

As part of our 2025 goal to increase the use of renewable energy sources, 3M continues to expand wind energy operations. In 2018, we entered into contracts with two wind energy developers to off-take the electricity from their projects, Gunsight Mountain and Rocksprings, both located in Texas. In 2018, the electricity output from these two projects alone is now 26.8 percent of 3M’s total global electricity use, thereby achieving the company’s 2025 renewable energy goal. With the goals we set in 2025, we’re raising the bar as part of our strategic focus on empowering Science for Circular, Climate, and Community. See the “looking forward” section for additional details.

Our renewable efforts don’t stop at the corporate level. Our facilities actively seek alternative energy sources, including active combined heat and power, solar, wind, and other projects, such as utilized excess steam. Learn more about the actions we’ve taken at one of our combined heat and power facilities [here](#) and solar energy installations [here](#).

**ISO 50001 and SEP™ certification**

The internationally recognized ISO 50001 standard, and the U.S. Department of Energy’s (DOE’s) Superior Energy Performance (SEP™) certification program, help 3M locations become attuned to recognizing and seizing opportunities to increase energy efficiency in site operations, and move from delivering energy projects in a loosely organized fashion to a structured system of management. By integrating the systematic ISO-based framework of “plan-do-check-act” for the management of energy in on-site operations, our locations have seen savings in energy costs and consumption, expansion of employee engagement, and increased visibility to the tracking of site energy performance. 3M has been busy increasing its ISO 50001 and SEP-certified profile, with 30 locations now certified or working toward certification under those two programs.

**Transforming the ways we use and evaluate energy**

The doors of collaboration were once again opened during the 2018 Plant Engineering Global Excellence (PEGE) & Energy Leadership Conference. For the second year in a row, with nearly 100 attendees, the conference was packed with a wide variety of valued subject-matter experts and a focus on the importance of partnerships in the achievement of our Sustainability goals, as well as currently existing opportunities that assure energy-efficient operations at our locations. Along with delivering those messages, external speakers yielded insight on Sustainability and process control from the perspective of leaders from other industries.

Beyond this one-day summit-style event, we also conduct monthly web conferences for our global network, at which we share upcoming or changing regulatory requirements and best practices.



From many perspectives, a productive year

Throughout the year, employees conducted treasure hunts at facilities to find conservation opportunities. Ten more sites joined in the hunt this year. These sites identified approximately \$4.5 million (USD) in energy savings opportunities. Several more sites are scheduled in the future.

Evaluating new metering technology in 2018 aided in the identification of energy costs associated with the manufacturing processes and allow for better analysis of energy cost reductions during both production and non-production time periods.

An energy analysis tool was developed in 2018 for use by all 3M locations. The tool is designed to quickly analyze and identify energy projects and estimate payback periods. It uses actual site energy costs and weather data for analysis of energy costs in lighting, motors, makeup air, and compressed air.

The Lighting Challenge continued in 2018, focused on 3M locations upgrading their lighting systems to light-emitting diode (LED) technology. At

the end of 2018, just under 70 percent of all global facilities had completed this challenge.

Also, energy coordinators were named for each of four regions: Asia Pacific, Canada, Europe, and Latin America.

Energy Excellence Awards

The Energy Excellence Awards honors individuals and teams that incorporate the goals of the Corporate Energy Program in engineering projects. The nominated projects and individuals actively demonstrate their commitment to include energy efficiency in the design of projects, in equipment selection, or in the use of alternative energy supplies. The award is one of global recognition within the 3M Engineering community. This year, we saw 29 project and individual award nominations total, from nine countries globally. In May 2018, three awards were given at the 2018 Engineering Awards ceremony in St. Paul, Minnesota:

3M Midway, Tennessee, U.S.

Steve White, Amy Powell, Dennis Shipley, Charles Shipley, Richard Fox, and Johnny Ramey. The Midway team chose to attack energy efficiency indirectly. By focusing on process improvements, they were able to significantly increase the size of each of their furnace batch runs, without a corresponding increase in electricity input. Fewer batch runs also translated into a decrease in landfill scrap associated with each furnace load.

3M London, Ontario, Canada

Steve Doyle, senior electrical technologist. Utilizing ISO50001 processes, site monitoring systems, current technology platforms, and the knowledge of its workforce, London Oxford implemented projects at every production and business center at their facility. Among them: combined heat and power installation, boiler automation, compressor upgrades and sequencing, lab heating ventilation and air conditioning (HVAC) cutbacks, and LED upgrades.

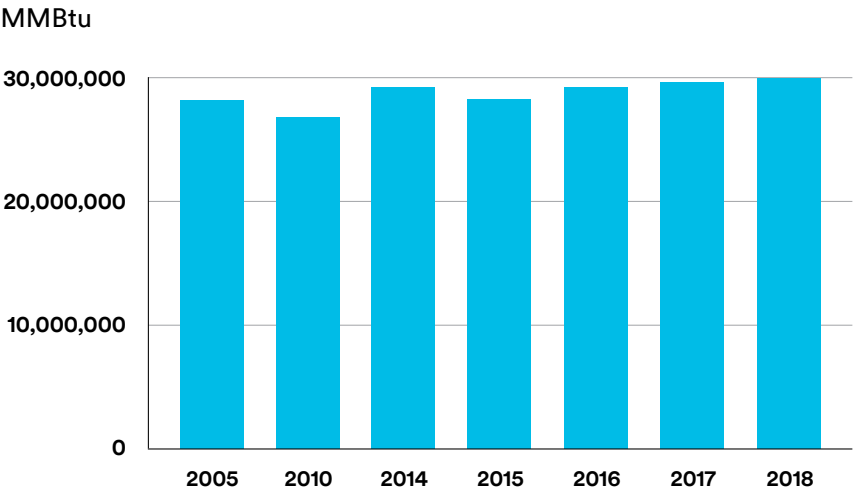
3M Gendorf, Germany

Thomas Hoelzlwimmer, process engineer. 3M Gendorf performed simple optimization of the control concept for its central cooling compressor and, in doing so, reduced the electrical power consumption at its facility by 5 percent. This, in turn, produced energy savings of \$100,000 (USD) per year.

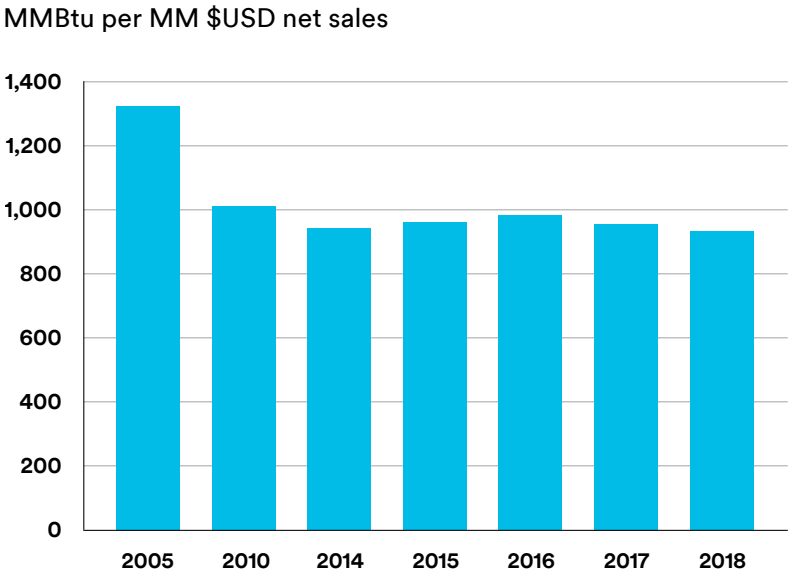
2018 Plant Energy Award

At the conclusion of each year, the Corporate Energy Management team recognizes the top facilities in our program for their results in energy metrics. To qualify, these facilities must demonstrate an active culture of energy management practices on-site, as evidenced by their delivered project savings, their energy team assessment score, and the resulting improved efficiency in energy intensity on-site. Eight platinum awards, 12 gold awards, and eight silver awards were presented to facilities with the most impressive results.

Global energy use



Global energy use



Direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions

Since 2002, 3M has reduced Scope 1 GHG emissions by 71.5 percent, providing a direct and immediate reduction in our impact on the environment. During this same timeframe, we have achieved a 63.7 percent reduction in absolute Scope 1 and 2 location-based GHG emissions. In 2018, our Scope 1 emission did increase. This is due to an increase in demand for products with high emission profiles. We are actively working on projects to reduce the emission profiles of these product lines and our commitment to innovate to decarbonize industry, accelerate global climate solutions and improve our environmental footprint. Results of these efforts will be included in our 2020 Sustainability Report.

Since 2002, the 3M EHS Laboratory has calculated 3M's GHG inventory in accordance with the World Resources Institute (WRI) / World Business Council for Sustainable Development (WBCSD) GHG Protocol Corporate Greenhouse Gas Accounting and Reporting Standard. The 3M

EHS Laboratory maintains an accreditation to ANSI/ISO/IEC 17025 through A2LA — a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA). Although it is not possible to put 3M’s GHG inventory methodology on the lab’s scope of accreditation, our calculation methodology has been improved by incorporating several quality system elements from ANSI/ISO/IEC 17025 Standard, including:

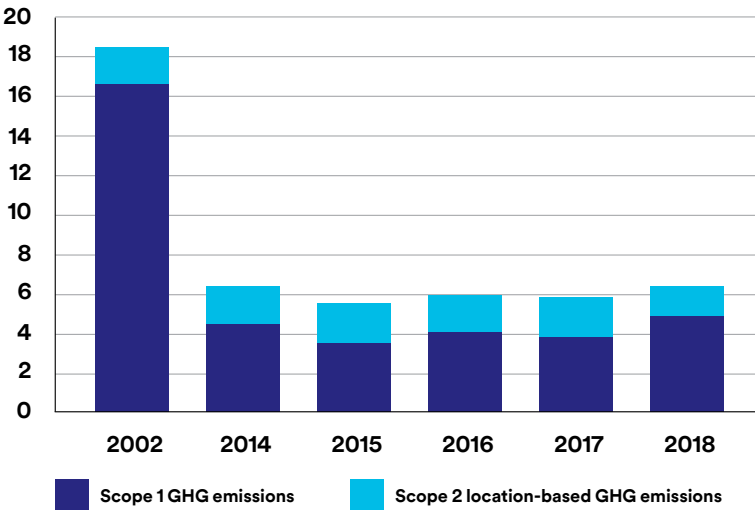
- Defined responsibilities and interrelationships of all key staff
- Documentation of key personnel qualifications
- Control over quality system documents and procedures
- Control of records
- Corrective and preventive action system
- Internal audit program
- Documented and approved calculation procedures

Every year, 3M calculates GHG inventory according to approved internal procedures that are

updated as needed to agree with current calculation methodologies. However, whenever a methodology change is implemented, 3M will, wherever possible, recalculate prior year’s GHG inventories to assure that past and current-year GHG inventories are comparable. Where this is not possible, 3M will either call this out or assure that the difference is not material. These quality system elements and procedures coupled with a robust internal and third-party review of our emissions help assure that 3M’s GHG inventory is aligned with the core principles of relevance, completeness, consistency, accuracy, and transparency. GHG emission reductions are achieved through a variety of methods: improving process and equipment efficiency, upgrading equipment, reducing our demand for energy use, increasing our use of renewable energy, and implementing and maintaining pollution control technologies. These methods, and more, are integral to the company’s overall success and assist us with the challenge of helping to address global climate change concerns.

Greenhouse gas emissions, Scope 1 and Scope 2

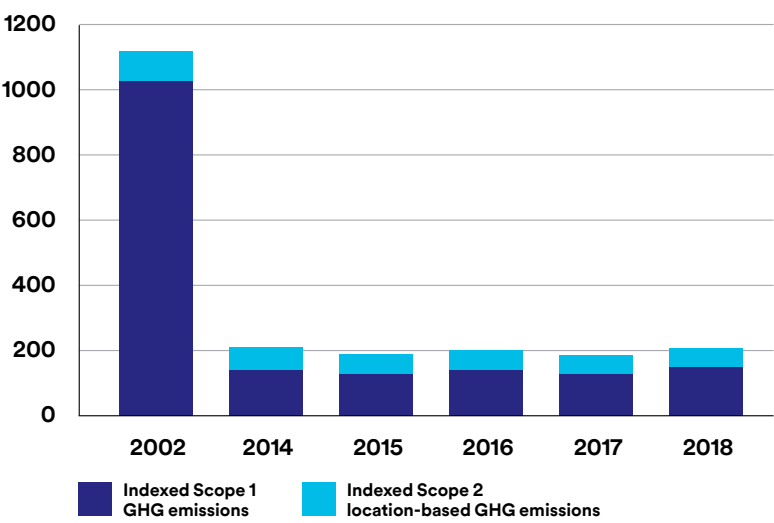
Million metric tons CO<sub>2</sub> equivalents, absolute



For methodology, please refer to the about report section: base year and other adjustments, and greenhouse gas metric table.

Indexed greenhouse gas emissions, Scope 1 and Scope 2

Million metric tons CO<sub>2</sub> equivalents per MM \$USD net sales



For methodology, please refer to the about report section: base year and other adjustments, and greenhouse gas metric table.

**GHG emissions attributable to our suppliers and customers (Scope 3)**

3M has been developing our Scope 3 GHG emissions inventory since the publishing of the WRI/WBCSD GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard in September 2011. We place a high value on decision making based on sound science. When the complexity of the supply chain does not allow for direct calculation, an input/output model calculation method is used.

We continually evaluate our methodology and auditing practices to assure meaningful, consistent, and accurate comparison of emissions over time. At this time, a base year has not yet been established for Scope 3 GHG emissions; see the looking forward section for additional information.

**Evaluating customer GHG emissions reductions**

To track progress towards our 2025 GHG customer goal, 3M has a process in place to develop reasonable estimates for avoided emissions associated with use of select 3M products. This estimation procedure is based on the ISO 14064-2 standard for determining GHG emissions reductions. It provides a framework for the estimation of emissions from the 3M product scenario (also referred to as the “project scenario”) in relation to a baseline scenario.

We start by defining the boundary of the 3M product scenario as extraction from nature through the end of the product use phase (product end-of-life or disposal is included where reliable information is available). The GHG emissions for this scenario are then estimated using high-level estimates and average data (for example, manufacturing emissions may be determined based on the average energy use per pound of all products produced at a manufacturing location, rather than determining the emissions

through detailed calculations using product-specific information).

The same boundary is then used for the estimation of GHG emissions for the baseline scenario. Because the data sources may be different than the 3M product scenario, we apply conservative assumptions as needed, where conservative is defined as a choice that results in the minimum GHG emissions for the baseline scenario. For example, if emissions data is not available for the production of an intermediate chemical in the baseline scenario, we assume the emissions to be zero. In some cases, there is no equivalent to the 3M product. The baseline scenario is the absence of the 3M product entirely. The result is a comparison that conservatively estimates the potential impact of the 3M product.

Due to the estimated nature of the data used, the uncertainty for these studies is plus or minus 50 percent, which approximates data of fair to good quality as defined in the WRI/WBCSD Product Life Cycle and Accounting Standard Quantitative Inventory Uncertainty Guide.

According to our calculations, in 2018 alone our customers avoided emitting nearly 15 million metric

tons CO<sub>2</sub> equivalents through use of select 3M product platforms as calculated in accordance with ISO 14064-2 and 3M standard operating procedures. Since 2015, this is over 41 million metric tons avoided CO<sub>2</sub> equivalent emissions through use of select 3M product platforms. This avoidance represents only a portion of our product portfolio. Products including films, fluids, and food safety, are a few examples of the selected products included in this evaluation. In the future, the list will likely expand as a result of the new [Sustainability Value Commitment](#).

**Air quality management**

An important component to 3M’s Sustainability strategy is our commitment to improving air quality globally.

As a company that uses many solvent-based materials, 3M inherently releases volatile organic compounds (VOCs) from many of our manufacturing processes. Because of this, many of our locations require permits with rigorous VOC tracking requirements. Even where tracking is not required from a regulatory perspective, 3M voluntarily tracks VOC usage and emissions from major sources of emissions in order to identify further opportunities for reduction. 3M has developed internal programs to minimize its VOC emissions. We track and report emissions based on raw material usage, engineering estimates, and stack test data.

For many 3M manufacturing processes, nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), hazardous air pollutants (HAPs), persistent organic pollutants (POPs), and particulate matter (PM) are emitted as products of combustion. These

pollutants, which are listed on many environmental permits for specific facility operations, are tracked and reported externally where required by federal, state, or local regulations for individual locations. 3M internally tracks all fuel usage and calculates the combustion emission rates using accepted emission factors.

**Main VOC by source type**

- 3M’s VOC emissions are primarily attributed to coating lines
- Reactors and mixing are also significant sources of VOC emissions

**VOC by location**

- 88 percent of our locations emit less than 100 tons per year VOC
- 31 percent of our locations emit less than 1 ton per year VOC

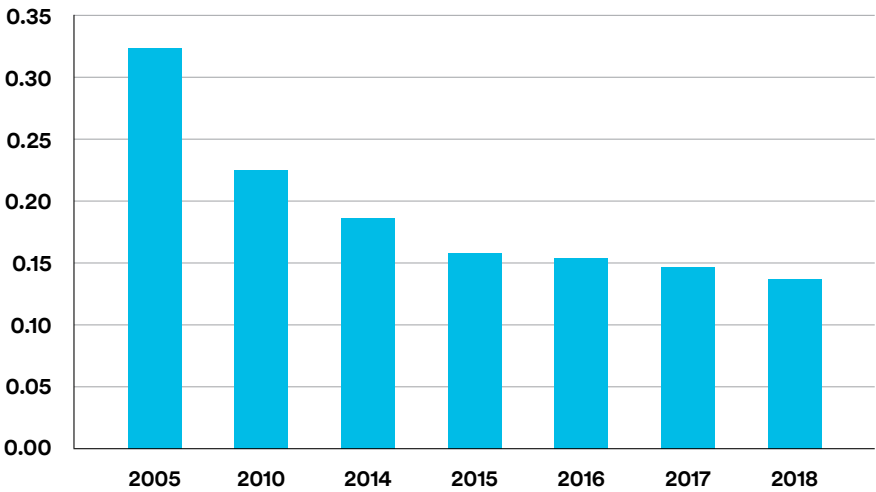


Implementing and maintaining pollution control

3M has made significant progress in reducing air emissions — at the source and by improving process efficiencies. Where emissions cannot be reduced within the process, 3M installs and maintains air emission control equipment as required by federal, state, and local regulations. We evaluate all equipment options, select those that are the most environmentally effective and cost-efficient, and strive to properly operate emission control equipment. Technologies include thermal oxidization, solvent recovery, carbon adsorption, biofiltration, electrostatic precipitators, baghouses, scrubbers, and cyclones.

Global volatile organic compound (VOC) emissions

Metric tons per MM \$USD net sales



Ozone depleting substances

The Montreal Protocol is the first worldwide agreement designed to protect human health and the environment against the adverse effects of the depletion of the stratospheric ozone layer. The agreement identifies the list of ozone depleting substances (ODS) that are targeted for control practices, reductions, or total phaseouts and provides a phaseout schedule. In addition, some countries have established regulations regarding the management of refrigeration appliances.

3M has set forth requirements in order to provide a framework for how 3M operations are to manage their refrigeration appliances containing ODS in the context of applicable international protocols, local regulations, and current and future economic impacts. These requirements include conformance to the Montreal Protocol when [applicable](#).

Looking forward

In the coming year, 3M will be charting the pathway to 100 percent renewable energy. Specifically, we will evaluate what will be required to improve all aspects of energy efficiency, what organizations can help us move to a total renewable energy portfolio, and what agreements with utility companies can help us reach our ultimate destination. For updates, and to learn more about our ongoing work on the 3M Strategic Sustainability Framework, [go here](#).

Regarding supplier and customer emissions, we are actively working toward developing methodologies around Scope 3 Categories 9 (downstream transportation and distribution), 10 (processing of sold products), 11 (use of sold products), and 12 (end-of-life treatment of sold product) to better understand opportunities to reduce our emissions, and to potentially consider the

establishment of a science-based target. Calculating Scope 3 Categories 9-12 is a challenging task to complete. Our 55,000-plus product lines are heavily diversified across a large variety of use cases. We are working to overcome this challenge while maintaining the core principles of the GHG inventory: relevance, completeness, consistency, accuracy, and transparency.

# Suppliers

## Sustainability is a journey we take with everyone in our supply chain.

### Our commitment

At each step in the supply chain, there are benefits (like employment and community-building) as well as the potential for negative impacts (like pollution or unsafe or unfair labor practices). Our commitment is to maximize the positives and mitigate the potential negatives by aligning our supplier expectations with our own corporate values. We expect our suppliers to be transparent about their environmental and social practices, provide improvement ideas, and

work with us to transform our shared supply chain when needed.

We actively verify our new and existing suppliers' performance against our expectations on a risk-prioritized basis, using our Due Diligence Management System, which is modeled after the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises.

Our Due Diligence Management System consists of the following elements, which aid with our continuous improvement efforts.

### 3M supply chain Due Diligence Management System

Values	Transparency	Transformation	Verification	Report
establish strong policies and management systems	identify and assess risks in the supply chain	design and implement a strategy to respond to identified risks	audit supply chain due-diligence	report on supply chain due-diligence activities
🔗🔗🔗	🔗🔗🔗	🔗🔗🔗	🔗🔗🔗	🔗🔗🔗

### Strong policies aligned with our values

The [3M Supplier Responsibility Code \(SRC\)](#) outlines 3M's foundational social and environmental expectations in the following areas:

- **Labor:** Requirements align with the [3M Human Rights Policy](#) and include important concepts like freely chosen employment (no forced, bonded, or trafficked labor), restrictions on working age (no child labor), and appropriate working hours and wages. Setting these expectations helps assure our suppliers' actions will reflect 3M's values on human rights as well as the values underlying the International Labor Organization (ILO) and laws such as the California Transparency in Supply Chains Act, the United Kingdom Modern Slavery Act, and the U.S. Federal Acquisition Regulations (FAR) on forced labor and human trafficking.

To learn more about these topics, see our [human rights section](#)

- **Environment, health, and safety:** We expect our suppliers to care as much about the safety of their workers and their communities as 3M does, and to implement proper procedures and controls to protect them
- **Ethics:** Expectations align to the 3M [Code of Conduct](#) and hold our suppliers to the same high standards of honesty and integrity. Suppliers must prohibit any form of bribery and corruption, and prevent conflicts of interest
- **Management systems:** We expect our suppliers to establish processes to systematically conform to the 3M SRC as well as all legal requirements, and to commit to continuous improvement

The SRC is based on the 3M corporate values for sustainable and responsible operations and aligns with the 10 Principles of the United Nations Global Compact, of which 3M is a signatory. The SRC is also materially consistent with the Code of Conduct of the Responsible Business Alliance (RBA).

The SRC, as with our previous 3M Supply Chain Policies, establishes 3M's expectations for new and existing suppliers anywhere in the world and for any supplied material or service. Our new supplier vetting process includes review of the SRC expectations and confirmation that their programs and practices as well as their subcontractors involved in the supply of products and/or services conform to standards consistent with the SRC. Our contract agreements have included expectations from our Supply Chain Policies and are now being updated to phase in and incorporate the SRC expectations.

We expect our suppliers to establish and implement their own relevant policies and programs in alignment with this SRC and to enforce these expectations with their own suppliers, thereby propagating our high Sustainability standards up our supply chains.

3M's Vice President of Strategic Sourcing and Packaging Solutions is accountable for 3M's Responsible Sourcing program. Executive leaders from Supply Chain, Compliance & Business Conduct, Strategic Sourcing, Legal, Sustainability, Human Resources, and Environmental,

Health, and Safety (EHS) are updated at least twice a year, and sourcing leadership quarterly, on the program's status. Both groups have the opportunity to provide input on the various program activities. Sustainability-related topics, along with supply chain, are discussed by the [Science, Technology, and Sustainability \(STS\) Committee](#) and taken up annually as an agenda item for the 3M Board of Directors, as required.

### Supplier risk assessment and supply chain transparency

In addition to full compliance with all applicable environmental laws, we expect our suppliers to integrate environmental responsibility into their operations. Suppliers should work to minimize adverse effects on the community, environment, and natural resources while safeguarding the health and safety of workers and the public. Additional information can be found: [here](#).

Our general supplier performance verification process begins with a self-assessment questionnaire (SAQ). The SAQ helps 3M

understand supplier programs and determine whether they conform to 3M expectations. An on-site assessment may be conducted, by 3M or a third party, to identify any deficiencies, which are ultimately addressed through an SRC Corrective Action Preventive Action (CAPA) process. CAPA may include announced or unannounced follow-up assessments.

If the assessment identifies gaps or findings, and if a supplier is not able or willing to resolve them, the CAPA would escalate to a corporate Supplier Corrective Action Request (SCAR). This assures appropriate resolution and conformance with 3M’s requirements. If a supplier is unwilling to work with 3M on the identified gaps or unable to close the issues within a reasonable timeframe, alternative actions are determined with a cross-functional business team to elevate and resolve the situation.

Additional expectations for higher-risk supply chains

In addition to the global SRC expectations for all suppliers, certain areas warrant additional

and specific formal expectations to drive more sustainable, responsible practices. This includes our use of certain minerals with the potential to be sourced from conflict areas, our use of timber-based products and other plant materials (pulp and paper), and all new suppliers in the higher-risk countries, such as in the Asia Pacific region.

Focus: conflict minerals

Another prioritized area in our raw material supply network is the responsible sourcing of minerals. 3M deplores the violence and inhumane treatment that has occurred in the Democratic Republic of Congo, adjoining countries, and other high-risk regions as defined by global regulatory bodies, and is committed to supporting responsible sourcing of 3TG (tin, tantalum, tungsten, and gold) from all such regions. Additional information can be found in our [Conflict Mineral Policy](#), and in [Supplier Direct, Supplier Requirements](#).

Focus: pulp and paper

3M has prioritized pulp and paper products as an area that warrants additional formal expectations

because of potential environmental risks, such as deforestation and habitat loss; potential human rights issues, such as infringement of indigenous peoples’ rights; and potential unsafe labor practices. As a global paper purchaser and Sustainability leader, 3M is well-positioned to positively influence practices throughout the forest products supply chain. We adopted our [Pulp and Paper Sourcing Policy](#) in the spring of 2015 to set standards of excellence for our suppliers and their suppliers through all tiers of supply from the forest. Additional information on our commitment can be found on our [Sustainable Forestry website](#).

Supplier diversity

3M is committed to diversity and inclusion, which involves working with small businesses. We strongly encourage using diverse suppliers across our sourcing organization. We back up our commitment through initiatives that directly seek out diverse companies to support 3M’s business needs. Equally important, we recognize that diversity is a core value that helps strengthen our competitiveness and provides opportunities for new ideas and fresh perspectives.

3M has a long-standing commitment to sustainable business practices and supporting the economic success of our communities, including working with both diverse and small-business suppliers. 3M considers a diverse supplier any supplier who qualifies for one or more of the following classifications: Minority-Owned Business; Women-Owned Business; and Small Business, including Small Disadvantaged, HUBZone, Woman, Veteran or Service-Disabled Veteran.

Our diversity program is about collaboration, communication, and active participation. Our supply chain organization is encouraged to actively participate in diversity outreach events. In 2018, 3M employees attended the Small and Disadvantaged Business Opportunity Council (SADBOC) Procurement Fair to identify additional diverse suppliers. We hosted two diversity events: the Small Business Liaison Officer Conference at 3M’s corporate facility and an outreach effort for small and diverse suppliers at 3M’s Washington, D.C., facility.

3M proactively reaches out to various organizations, including the National Minority Supplier Development Council (NMSDC), Women’s Business Enterprise National Council (WBENC), Metropolitan Economic Development Association (MEDA), Small Business Administration (SBA), and others. We also have a supplier portal that allows businesses to provide a portfolio of their capabilities, which is distributed to 3M’s sourcing organization.

3M establishes goals and regularly tracks the dollar value of goods and services purchased from small businesses and diverse suppliers in concert with goals set annually with the U.S. federal government as part of our subcontracting plan for federal government contracting.

To achieve our goals, 3M has implemented a four-part strategy aimed to:

- Increase our spending with current diverse suppliers by reviewing our existing diverse suppliers by diversity category
- Identify additional diverse suppliers in our existing supply base by reviewing our top non-diverse suppliers by spending category

- Find “new-to-3M” diverse suppliers
- Further disrupt the status quo by working to move some of our Tier 2 spending to Tier 1 and focusing on diverse suppliers in our request for proposal (RFP) activity

In 2018, 3M spending with small businesses represented 26 percent, of which 4.6 percent were diverse suppliers. Our progress is routinely communicated to leadership across the organization.

We remain committed to supporting small businesses and diverse suppliers by continuing to reassess elements of our approach, working across the industry to assure best practices.

More on our supplier diversity program can be found in the partners and suppliers diversity website, [here](#).



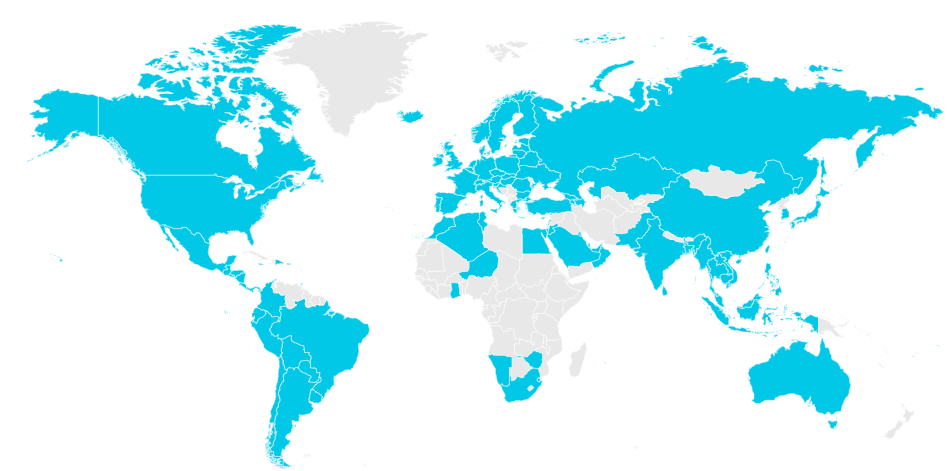
**Our 2025 Goal:**  
**Drive supply chain**  
**Sustainability through**  
**targeted raw material**  
**traceability and**  
**supplier performance**  
**assurance.**

We understand that our Sustainability impacts extend beyond our own operations. By purchasing raw materials and services from small and large companies all over the world, we participate in a global, complex supply chain. And it doesn't stop there. Our suppliers have their own suppliers, extending back to the original source of each material we use.

**Our actions**

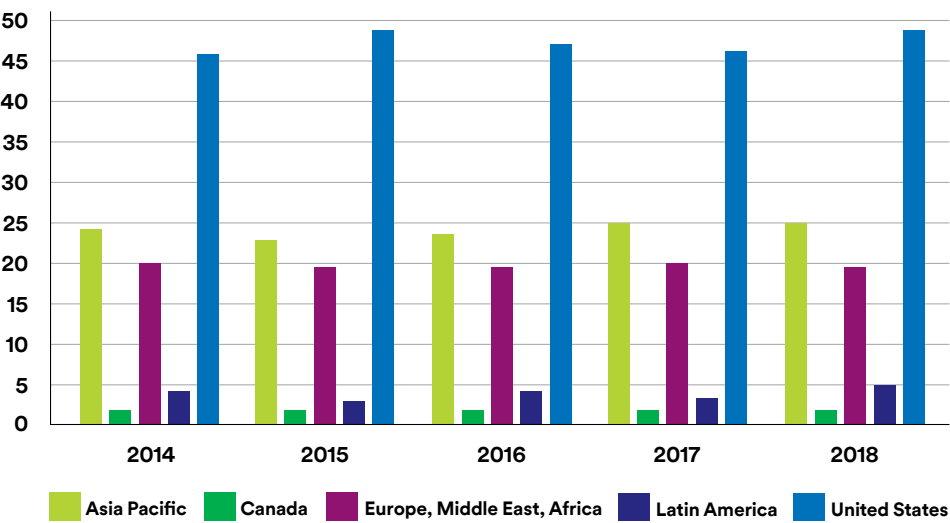
3M works with a broad, complex supply chain, consisting of over 78,000 suppliers in over 300 subcategories in 110 countries around the world.

**Supplier locations**



**Supplier spend by region**

2018 percentage



The SRC (Supplier Responsibility Code) Steering Team provided training in 2018 to more than 200 assessors globally to assure a detailed understanding of 3M's SRC expectations, processes, and supporting tools. The training covered each of the elements of the SRC, including labor and human rights, EHS, ethics, and management systems requirements. In addition, training materials were made available on 3M's business partners website for suppliers to expand their knowledge in such topics as global bribery and corruption awareness; eliminating forced labor, slavery, and human trafficking from the global supply chain; and preventing corruption; and mitigating compliance risk for distributors and business partners.

## Responding to risks, transforming our supply chains

We are constantly managing changes in supply markets both where there is an opportunity to extract value and defensively where necessary to mitigate risk and secure supply. As described earlier, we focus efforts on the salient issues in categories where human rights and environmental risks are the greatest. More broadly, we conduct robust risk prioritization to determine other suppliers we will engage via an assessment against our SRC, which includes policy and contract conformance.

3M has historically used industry indices to identify higher-risk supply chains and has adopted the use of a data-driven software solution in conjunction with industry information and Lean Six Sigma (LSS) tools to optimize and strengthen its risk management processes. The criteria matrix helps rank global suppliers, using multiple factors such as geographic, category, and business-critical elements to determine where assessments should be performed.

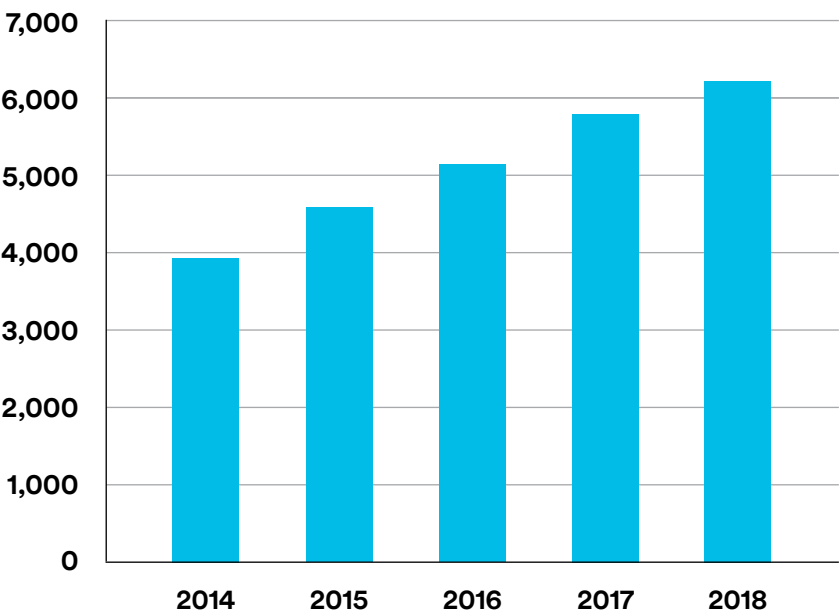
## Verifying our supplier performance

Although applicable to all suppliers, our supply chain risk assessment process focuses on prioritized suppliers, each of which must complete an SAQ and/or be subject to an on-site assessment as specified in our SRC.

In the past eight years, over 6,300 self-assessments or on-site audits of suppliers have been conducted in prioritized countries. Along the way, our assessment process has become more evolved and more comprehensive. In 2018, 3M completed 550 assessments, which included the comprehensive RBA framework and expanded from 10 to 18 countries, covering every region of the world.

## Cumulative supplier assessments, since 2008

Total number



In 2018, we updated our assessment progress and increased the scope of each assessment.

## Forced labor and human trafficking

3M’s efforts to eradicate forced labor and human trafficking from its direct supply chains are discussed in more detail in [3M’s California Transparency in Supply Chains disclosure](#) and [3M’s United Kingdom Modern Slavery Act Statement](#). These disclosures communicate our commitment to legal and ethical practices through our membership in the United Nations Global Compact, in implementing 3M’s Code of Conduct, and by working with others to abolish human rights atrocities, especially as it relates to human trafficking, forced labor, modern slavery, and other related crimes. 3M is committed to doing our part to eradicate human trafficking in any form from the global supply chain. We have robust policies and systems in place to control these practices in our own operations and with our suppliers. As 3M sets a high bar for itself regarding labor and employment, it expects the same from its suppliers as articulated in the SRC.

## China prison labor allegations

In 2018, 3M launched an investigation into labor practices of suppliers in China based on allegations made in the Financial Times. We completed a document and record review of 3M suppliers in China and found no evidence of suppliers using prison labor for the manufacturing or packaging of 3M products. These findings were confirmed by an independent third-party onsite audit of suppliers based near the prison.

## Conflict minerals actions

### Forging ahead with continuous improvement

The 3M Conflict Minerals program, now in its sixth year, has gone through continuous improvement, based on learnings from past campaigns and external benchmarking that provided ways to optimize and increase the effectiveness of program activities.

As part of our responsible sourcing expectations, in 2018 3M refreshed its Conflict Minerals Policy and 3TG-related objectives for our suppliers. 3M expects its suppliers to adopt a similar policy and due-diligence management system and require the same of their suppliers to proliferate responsible sourcing practices throughout the supply chain.

In addition, 3M is an active member of Responsible Mineral Initiative (RMI), which develops tools and guidance for companies regarding conflict minerals. Our membership in RMI and various sub-teams such as the Smelter Engagement Team (SET), Due Diligence Practice Team, and Plenary Team enable 3M to be involved in special activities like the Due Diligence White Paper update. The teams provide useful venues for 3M to offer its ideas and learn from other member companies as we all work together on this important journey of transforming our supply chains.

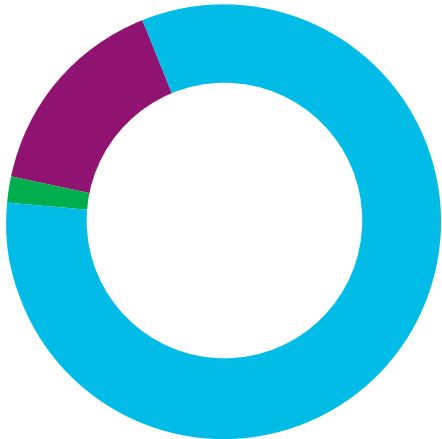
With the evolution of conflict mineral programs, 3M partnered with a third party to manage our 2018 program outreach and data collection. The third-party platform automates the collection, validation, and centralization of data to support

3M’s responsible minerals sourcing program. Suppliers entering the portal are linked to training resources with access to topics and webinars such as Responsible Minerals Trends and Best Practices, Global Conflict Minerals, and Practical Tips to Enhance Your Conflict Minerals Program.

3M’s membership in RMI opens alignment to emerging risk and assessments in raw materials supply chains utilizing the Risk Readiness Assessment (RRA) tool. RRA is the basis for corporate assessments of material risks in 3TG supply chains and in particular with social and environmental risks.

The EU Conflict Minerals Regulation, which takes effect in 2021, will expect companies to take a wider view of their sourcing practices. When it takes effect, regions beyond the Democratic Republic of the Congo explicitly will come into focus of our Conflict Minerals Program. 3M’s SRC covers foundational expectations for our suppliers by taking a holistic approach to supply chain due diligence in areas of labor, environmental health and safety, ethics, and management.

Conflict mineral supply chain traceability  
2018 percentage



● RMAP conformant	81%
● RMAP active	2%
● RMAP not enrolled	15%

Based on Responsible Minerals Assurance Policy (RMAP)

Members of our European Government Affairs team have been closely aligned with industry and government to understand the scope, impacts, and timing of the new European regulation. The team has proactively assessed potential applicability so 3M will be best prepared to implement the new rule.

Additional information can be found in the 3M Conflict Minerals Securities and Exchange

Commission filings found on 3M Supplier Direct, [Supplier Responsibility Expectations](#).

Pulp and paper actions

As part of our regular review process, in 2018 we republished our Pulp and Paper Sourcing Policy that was published in 2015 and the supporting Policy Conformance Guidance Document. Changes to the policy included updating guidance links and resources, and adding details and clarification where beneficial. We also added translated versions of the policy and Policy Performance Guidance Document for three additional languages including Korean, Spanish, and Russian, bringing the total number of translated versions to seven languages.

Pulp and paper policy implementation on the ground

Throughout our policy implementation, we have seen several examples of marked improvements in responsible pulp and paper sourcing practices

as a result of our engagement with suppliers. These include:

- Meeting with suppliers’ senior corporate executives on the importance of assuring responsible and sustainable supply chains, and agreeing to collaborate on that goal
- Suppliers establishing new positions within their companies
- Significant increases in supply chain traceability and transparency
- Increased engagement by our suppliers with their upstream supply chain

Through an online survey, 3M suppliers can provide complete supply chain information all the way to the forest sources, or they can easily forward parts of the online survey to their suppliers (paper or pulp mills, for example) for completion. We aim to work with suppliers and peer companies to document as much of our global paper supply chain as possible, to amplify our efforts to mitigate risks, improve efficiencies, and drive sustainable practices throughout the supply chain.

We partner with a third-party provider to help us review

Pulp and paper supply chain traceability  
2018 percentage



● Traceable to forest source or 100% recycled	36%
● Traceable to pulp mill	30%
● Traceable to paper mill	21%
● Not yet engaged or traceable	13%

information we obtain from our supplier surveys and combine that with geography and industry-specific knowledge to conduct “desktop” risk assessments of our supply chains. We use these assessments to prioritize further engagement to learn more about our suppliers’ responsible sourcing and sustainable forestry practices.

This deeper engagement could take the form of a series of web conferences, in-person meetings, or field assessments at the mill and/or forest level. We do not limit this engagement to our direct suppliers. In fact, as appropriate, we will work directly with indirect (Tier 2 and Tier 3) suppliers on policy conformance verification work, with a goal of involving our direct (Tier 1) supplier(s) in these activities whenever possible.

With the help of our third-party provider, we have conducted 12 field assessments so far across all regions, covering more than 14 million hectares. Four of those assessments were of Tier 2 pulp mills, which were also attended by a Tier 1 supplier. 3M’s participation on supplier field assessments with our third-party provider helps us to understand firsthand the challenges faced by pulp and paper companies and forest managers around the world. This in turn enables us to actively participate in developing solutions and advancing conversations about responsible sourcing and sustainable forestry.

3M and our third-party provider are committed to working with suppliers to promote protection of high conservation values in the



Canadian Great Northern Forest (boreal forest) and the ability of the forests to provide wildlife habitat, ecosystem services, and natural beauty for generations to come. This is accomplished through field assessments of supplier practices, deep engagement with forest managers and scientists, and a focus on identifying innovative management practices. To maximize the likelihood of success, these actions require collaboration with industry, indigenous peoples and local communities, with the aim of restoring balance to the relationship between people and nature.

Each assessment results in a comprehensive report detailing the supplier’s performance against our policy requirements, and action items to address any performance gaps. We expect each supplier to develop corrective action plans with reasonable timelines and continue to collaborate with 3M on resolution of identified opportunities. More information on these assessments can be found in our [Pulp and Paper Sourcing Policy progress reports](#).

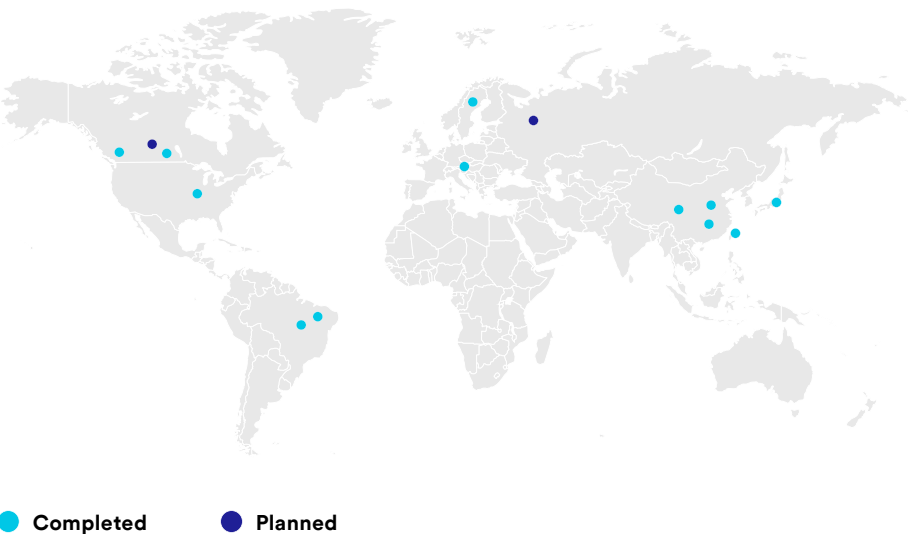
Conservation in the Carolinas

3M helped launch the Carolinas Working Forest Conservation Collaborative (CW FCC) along with the American Forest Foundation, International Paper, and The Procter & Gamble Company in 2017.

Through 2018, family woodland owners in the U.S. Coastal Carolinas Plain were directly engaged, new components were added to the project, such as forester trainings, and much broader partnerships were built than originally anticipated. All of this is with the intent of accomplishing the following objectives:

- Increase awareness and understanding of the importance of sustainable forestry and active management among 30,000 woodland owners who collectively own 2.4 million acres of forestland in the Coastal Carolinas Plain region
- Work with at least 450 landowners across 36,500 acres in the project counties to connect them with technical assistance and resources to get them started in forest management
- Engage at least 160 woodland owners within the project area to enhance, restore, or expand bottomland hardwood forests and quality habitat for at-risk species on at least 13,000 acres
- Certify at least 120 landowners in a recognized forest certification standard

Pulp and paper assessments



Collaboration for change

3M Brazil is a signatory to The National Pact to Eradicate Slave Labor and has now joined InPACTO — the Institute for the National Pact — a trade association focused exclusively on collaborative efforts among

members, including 3M, committed to the goals of the National Pact.

Supplier recognition

Our Supplier Recognition program seeks to recognize those outstanding suppliers that help us succeed in accomplishing our **Vision of 3M technology advancing every company, 3M products enhancing every home, and 3M innovation improving every life.**

Each year 3M sourcing professionals nominate exemplary suppliers to be recognized for world-class performance, based on strategic support, contract compliance, actions taken to improve 3M’s competitiveness, and overall supplier performance.

In 2018, 3M recognized over 30 suppliers among thousands in its global supply base for world-class performance in providing products and/or product. They were honored at regional events in Canada, EMEA, Latin America, and the U.S., as well as local programs in Japan and Korea.

Learn more about the Supplier of the Year Award [here](#).

Looking forward

3M values continuous improvement and is conducting a Lean Six Sigma project to improve the efficiency and effectiveness of the SRC process and toolsets. The project is global in scope and will positively impact the methodology, resources, and results of the activity.

We recognize there are risks in the supply chains of many materials. Through strategic partnerships, we are continuing to increase our ability to mitigate risks through collaboration. For example, RMI is actively working on formulating risk mitigation tools for the cobalt industry. We will increase efforts with providers of pulp and paper, understanding and evaluating conformance with 3M’s environmental and social expectations, which will include field visits. 3M is committed to expanding our due-diligence efforts for higher-risk materials to further mitigate risk to our business and advance responsible supply chains.

# We create what

Introduction	190
Our customers	192
Innovation management	198
Our products	210

# Our customers' challenges are our challenges.

Using our [46 technology platforms](#) and collaborative culture, we invent products that help our customers solve the issues they are facing in many areas, including health, safety, and energy.

We are not stopping there. We have established aggressive goals for 2025, ranging from investing in sustainable materials and energy efficiency, to community-wide approaches to water management and helping our customers reduce their greenhouse gas emissions. We have also set 2025 goals around building a diverse workforce and educating individuals on worker and patient safety in health care and industrial settings.

Not only that, but we have made such significant progress on the 2025 goals that we're raising the bar. This includes our new product goal as an example of the aggressive targets we'll be setting in the coming months as part of our strategic focus on empowering Science for Circular, Climate, and Community.

**Our new product goal is a commitment that every new product entering the development process in 2019 is required to uphold a Sustainability Value Commitment.**

This drives not only continued focus on social and environmental stewardship, but ideation on better ways to innovate for greater positive societal impact.



# Our customers

## Customers are at the center of 3M decision making.

### Our commitment

Whether it's technology, manufacturing, global capabilities, or brand, we are committed to connecting our fundamental strengths to customers. We engage them. We delve into their processes, their problems, and their promises to their customers. We bring our technology to them, along with a deep domain expertise, and we deepen it further when we work side by side with them.

In the process, we not only meet their expressed needs — we are often able to identify and address unarticulated needs. In both cases, we create solutions for them and, at the same time, innovative growth platforms for 3M.

Additional details can be found in our innovation management section: [here](#).

### Creating competitive advantages for customers, and for 3M

At 3M, we talk about how many of our products are specified or regulated. Specified: designed for the customer. Regulated: meeting specific performance and requirements. Working in both categories carries us through multiple commerce channels, distribution models, direct models, retail models, and, increasingly, e-commerce. Throughout, we maintain a customer-first focus, making sure we're in a position to deliver value where they want it, when they want it, how they want it.

### Building Sustainability into all new products

Where many companies view the topic of Sustainability in product development as a challenge, at 3M we have taken an aggressive approach, working to identify and understand future Sustainability needs, and to expand our portfolio of products with Sustainability advantages.

By embedding Sustainability into our R&D process, our brands, and the mindset of our suppliers and customers, we're able to move 3M's growth to new levels and advance our commitment to improving our business, our planet, and every life. Additional information can be found in [Our Products](#) and [3M's Sustainability Value Commitment](#).

### 2025 Goal: Invest to develop more sustainable materials and products to help our customers reach their environmental goals.

We recognize some of our greatest positive impact can be realized by helping our customers improve their environmental footprint. For that reason, an increased focus on delivering more sustainable materials and components is core to our innovation and Sustainability strategy.

### 2025 Goal: Provide training to five million people globally on worker and patient safety.

We will continue to support empowerment and enrichment for global health and safety issues through our commitment to improve the health and safety of people worldwide. To measure progress against this goal, we will track the number of training experiences delivered by our Health Care and Personal Safety Academies.

### Our actions

We have four strategic priorities that deliver value for our customers: portfolio management, transformation, innovation, and people and culture.

In all, we work to understand our customers' business models, what they have promised their customers, what our role is in the value chain, and how we can help them deliver on their promises. It is our Vision, as we aspire to advance every company, enhance every home, and improve every life.

### Portfolio management: leveraging our 3M Value Model

In 2012, we introduced a new framework for thinking about portfolio management, looking across the entire 3M portfolio with an eye toward relative strategic and financial attractiveness. At that same time, we consolidated from 40 to 23 divisions in order to create more value and relevance for the customer.

Today, portfolio management continues to be a key to the way

we're reshaping the company, how we're prioritizing businesses to emphasize the greatest value creators in our portfolio, and how we're looking at potential acquisitions, divestitures, and partnerships. It's about accelerating into the future, driving greater and greater prioritization.

### Transformation: continuing a critical journey

In 2018, we made great progress in our transformation journey, which leverages our strengths in technology, manufacturing, global capabilities, and brand to provide a more positive overall experience for our customers. Specific accomplishments:

- Successfully deployed ERP (enterprise resource planning) systems in Europe and U.S.
- Simplified, standardized, and redesigned business processes
- Advanced streamlined, end-to-end engagement with customers
- Created value through new service models

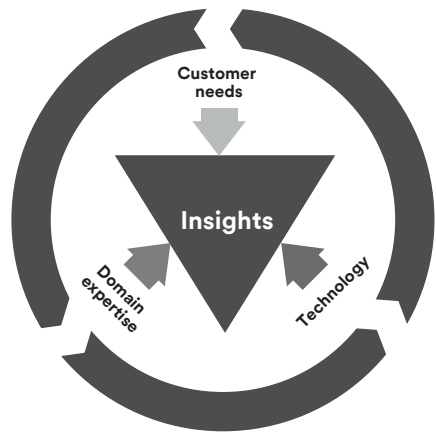
Moving forward, we will work to enhance customer service, increase value creation, leverage ERP capabilities, streamline deployments, and utilize data and analytics.

Innovation:  
customer-inspired

Technology itself is not sufficient to create differentiated products and solutions. Our innovation truly comes from the confluence of customer and market insights, technology, and our culture of collaboration and entrepreneurship. We strive to invent things that are not only new, but useful. That is why 3M scientists work directly with customers to solve their unique challenges. We take the time to get to know them, to learn how they live and work — and to understand what we can do to improve their lives. Collaborating with customers assures us we are in tune with their needs. Our most successful products are infused with strategic customer insights throughout the entire product development process.

Customer  
insights

Customer-inspired innovation



People and culture:  
collaborating and  
creating locally

When collaboration results in meaningful innovation — solving real problems — it becomes amazing and awe-inspiring. To get there, we believe it’s essential to be close to our customers.

That’s why 3M has 54 customer technical centers across the globe, where our customers can experience firsthand the breadth of 3M technologies and how they can benefit from them. That’s also why we have labs in 36 countries, where our scientists work closely with our customers to develop solutions for their specific problems.

Some of the problems addressed in our technical centers and labs are connected to regional and local issues. Globally, for example, rapid population growth in urban areas is creating challenges related to energy efficiency, clean water, and environmental protection. Our local scientists leverage 3M technologies to develop relevant solutions that are unique to their region, often collaborating with local customers.

Additional details can be found in our [innovation management section](#).

Education that raises  
everyone’s bar

Proper use of health and safety products is critical to infection prevention, personal safety, and overall health. Building on our existing customer education programs, 3M has created training libraries that are accessible where, when, and how customers want them: for on-demand education, live webinars, in-person events, and education resources.

We deliver educational content to health care professionals at hospitals and clinics, professional conferences, and via online webinars — all around the world, through [3M<sup>SM</sup> Health Care Academy](#). This is not only important to helping customers get the most out of our products, it’s our commitment to helping professionals improve outcomes for their patients and customers.

The same holds true for our [Personal Safety Division](#). In a rapidly evolving business and occupational health and safety environment, our education and training programs can instruct workers on workplace safety hazards and health risks, personal protection equipment (as regulated by the Occupational Safety and Health Administration, or OSHA), and proper use and maintenance of 3M products.

In 2018, total number of training instances was 89,900. This only includes our eLearning platform and a couple in-classroom events. Moving forward, we are working to further expand our record system for in-classroom events.

Some 2018 training accomplishments can be found [here](#).



**Innovation taken to a higher level: our Sustainability Value Commitment**

In 2018, we took the biggest step yet in viewing innovation through a Sustainability lens: We announced that beginning in 2019 3M products entering the new product commercialization process will be required to include their Sustainability impact and how it drives impact for the greater good. This is an ambitious commitment, given that 3M launches approximately 1,000 new products each year.

The new requirement is part of 3M’s commitment to Sustainability in fulfilling its role as a purpose-driven business, and builds on our legacy of Sustainability leadership among global companies.

Examples of a Sustainability Value Commitment in new 3M products include materials reduction, recyclability, energy and water savings, responsible sourcing, renewable materials, and/or reuse appropriate for the specific product.

This commitment also includes products with a core purpose of helping to solve an environmental and/or social problem, such as improving air quality, reducing greenhouse gas emissions, and improving worker and patient safety in health care and industrial settings.

3M’s new product requirement will have a global impact, starting with our operations in the 70 countries where we operate and in the products we sell in nearly every country. It will also help our customers reach their own Sustainability goals. Most important, it impacts 3M employees. When you work for 3M, you are changing the world.



**Looking forward**

As a large and diverse global science company with customers spanning many industries and global markets, we have the opportunity to make an even greater impact in Sustainability. As part of our strategic focus on empowering Science for Circular, Climate, and Community, we will work to design a world where 9 billion people can thrive by applying boundaryless, collaborative science to reinvent the products, processes, and systems that improve every life.

We will continue to leverage our diversified technology portfolio to create innovative solutions for our customers and markets. We are evolving our technology platforms for the changing and anticipated needs of high-growth markets, and we are augmenting our material science expertise with digital, where appropriate, to create value for our customers and for 3M.

In 2019, we will also apply the new 3M Sustainability Value Commitment to new product commercialization, across the board, and across the globe.



# Innovation management

Applying science to solve for Sustainability.

## Our commitment

At 3M, asking “what if” is our way of life. We are a company rooted in scientific exploration and discovery. We believe that every problem has a solution. All our businesses are connected by our fundamental strengths — technology, manufacturing, global capabilities, and brand — which allow us to invent, build, and sell products across our vast global network.

R&D is our heartbeat. We continue to invest in scientific research and product development in close partnership with our customers and the marketplace. R&D fosters a constant stream of unique and cutting-edge products that drive organic growth. In fact, in 2018, we invested 1.8 billion (USD), or nearly 5.5 percent of our sales, back into R&D.

Another reason for our success is innovation: There are no silos here. Our [46 technology platforms](#) are shared and combined across businesses and regions to invent unique products for a variety of industries. No single business owns any of these platforms. They are managed by the company and can be leveraged by any of the businesses to serve their respective customers or markets.

Our “15% Culture” — instituted six decades ago — inspires creativity, risk-taking, and collaboration. It gives 3M employees the freedom to take risks and learn from our mistakes. That freedom is essential to scientific discovery. 3M employees have the freedom to spend 15 percent of their time on projects that interest them. Out of that time come new ideas that might eventually become successful new 3M products. Learn more about our 15% Culture [here](#).

3M has earned more than 113,000 patents over the years, a testament to the strength of our innovation engine. Every year, on average, 3M earns 3,000 patents.

The policies and standards that guide the design, manufacturing, marketing, and sale of 3M products share a common foundation: the [3M Code of Conduct](#).

The [Code of Conduct](#) is an overarching guide to the appropriate decisions and actions of 3M individuals and teams as they go about their work. It defines our values and the responsibilities 3M employees and 3M suppliers must meet.

Under this broad umbrella of values are principles that more specifically outline what 3M believes is the ethical approach to various work situations, including situations that involve innovation management of 3M products.

## Product Safety, Quality, and Stewardship Principle

Our customers depend on 3M’s products to advance, enhance, and improve their companies, homes, and lives — and we have a responsibility to live up to those expectations. For this reason, we must strive to produce only the highest-quality products. Every item we sell must meet rigorous quality standards and must be safe for its intended use.

As detailed in our [Product Safety, Quality, and Stewardship Principle](#), located under [3M’s Code of Conduct – Be Fair](#), 3M employees must know and follow all applicable laws, regulations, and 3M policies, standards, and procedures for product safety, quality, and stewardship and must report and respond to concerns diligently. 3M management is responsible for addressing reported concerns and assuring that 3M employees are properly trained in applicable laws and regulations and 3M policies, standards, and procedures.

Further, we take it as our responsibility to produce products with superior environmental

performance across their entire life cycle, including product reuse and repurpose, and to work with our suppliers and business partners so that their operations support these same objectives.

## Product Safety, Compliance, and Stewardship Policy

[3M’s Product Safety, Compliance, and Stewardship Policy](#) underscores our commitment to commercializing and selling products that are safe for their intended uses, compliant with all applicable Environmental, Health and Safety (EHS) regulations and 3M expectations, and developed with a goal to continuously improve the EHS performance of products and corresponding manufacturing processes.

Each 3M business group must maintain processes for the effective global review of product safety, compliance, and stewardship requirements. This includes consideration of EHS aspects relevant throughout the life cycle of a product, including raw material selection, product design, formulation, manufacturing, marketing, sale, intended and

anticipated use or misuse, recycling, reuse, repurpose, and disposal. The process must meet and maintain continuous compliance with applicable national, regional, and local regulations, and 3M expectations. These business processes must be incorporated into New Product Introduction (NPI) and Management of Change (MOC) procedures; and product safety, compliance, and stewardship requirements must be integrated into the development, commercialization, and sale of 3M products.

In addition, we have established an internal standard to assure uniform compliance globally for the manufacturing, sale, testing, and promotion of medical devices, food or drink, food or drink supplements, food or drink additives, drugs, and cosmetics for use in or with humans or animals.

Chemicals Management Policy

3M is a science-based company committed to applying our scientific expertise to improving lives. Helping people live safe and productive lives is important to 3M — for our employees, our customers, and everyone living on the planet. Chemicals are essential for producing 3M’s broad range of products, and part of 3M’s role in helping people live safely is effective and responsible chemical management.

In 2018, we adopted the new [Chemicals Management Policy](#), which replaces existing policies and standards on chemicals management. This commitment reflects the evolving values of 3M and our stakeholders. Under this policy, to continuously improve the environmental, health, and safety (EHS) attributes of our products, 3M has identified specific chemicals whose use in products and manufacturing processes is subject to approval by the Corporate EHS Committee. In 2018, 3M has targeted 31 specific chemicals on which we are reducing our reliance. Our Managed Substance List goes beyond the 31 targeted substances. Any substance being considered for

use in 3M products and processes requires prior corporate approval.

Advertising and Product Representation Principle

3M’s reputation as a responsible company extends to the products and services we offer and how we represent them. 3M must communicate honestly and accurately about 3M’s products and services. Learn more on this by visiting our [Advertising and Product Representation Principle](#).

It’s our policy to represent our products truthfully, fairly, and accurately in all sales, advertising, packaging, and promotional efforts. All product claims must be substantiated and technically accurate as specified by the [Advertising and Product Representation Policy](#). 3M’s Environmental Marketing Claims Support Team assists businesses in the substantiation of environmental product claims and comprises laboratory scientists, legal staff, life cycle management professionals, and others with marketing and business expertise.

Hazard communication and composition disclosure

Communicating the potential hazards of 3M materials supports 3M’s core values and is an integral part of keeping stakeholders informed about 3M materials. The vehicles for communicating these hazards and product chemical components include [safety data sheets \(SDS\)](#), product labels, product literature, instructions for use, transportation classification documentation, and other communications tools. Each business group must evaluate the potential hazards of 3M materials and transmit, in local country language(s), information about the hazards to employees, contractors, and customers; it must meet all regulatory requirements and 3M standards and guidelines; and it must promote informed decisions about the materials’ proper and safe handling, use, and disposal.

Alternatives to animal testing

3M is a major advocate for the use, wherever practicable, of alternative test methods (non-animal) to help develop safe products. 3M is currently utilizing many of these alternative methods, such as computational toxicology and in vitro testing using isolated tissues or cells. We are also investing in the internal and external development of new methodologies that replace animal testing. Where animal testing is required, we follow our [Animal Welfare in Testing and Research Policy](#).

Human Subject Research Policy

Our [Human Subject Research Policy](#) protects the rights, safety, and welfare of human subjects who participate in 3M supported research. All supported research involving human subjects must be conducted in accordance with all applicable national, regional, and local ethical and legal rules and regulations, and must be conducted in accordance with three principles, as described in the Belmont Report: respect for person, justice, and beneficence (or, do no harm).

3M’s Sustainability Value Commitment

Beginning in 2019, all new products entering the new product commercialization process will be required to describe their product’s Sustainability impact and how it drives impact for the greater good.

A Sustainability Value Commitment in a new product is a clear demonstration of how the product incorporates environmental and/or social factors to contribute to our aspirations laid out in our Strategic Sustainability Framework. Example of consideration including the following: reusability; recyclability; energy, waste, and water savings; and responsible sourcing and/or renewable materials appropriate to the specific product throughout a product’s life cycle.

A Sustainability Value Commitment can also stem from a core purpose in which the product helps to solve an environmental and/or social challenge — such as improving air quality, reducing greenhouse gas emissions, and improving worker and patient safety in health care and industrial settings.

The impact of 3M’s new product requirement is global in scale: 3M

launches approximately 1,000 new products each year, with a significant fraction of its revenue generated from products released in the past five years. Beyond 3M’s own operations, a primary reason for the goal is to help customers achieve their Sustainability goals. This new product goal creates even more opportunities to collaborate with customers on solutions that improve lives around the world.

# Our actions

The challenges we must tackle for a sustainable future don’t always operate by clear rules or methods, but we see them clearly. They are broad. They are interrelated. They are solvable. And we know science can help tackle them. We at 3M have the unique opportunity to apply our passion and collaborate enterprise-wide.

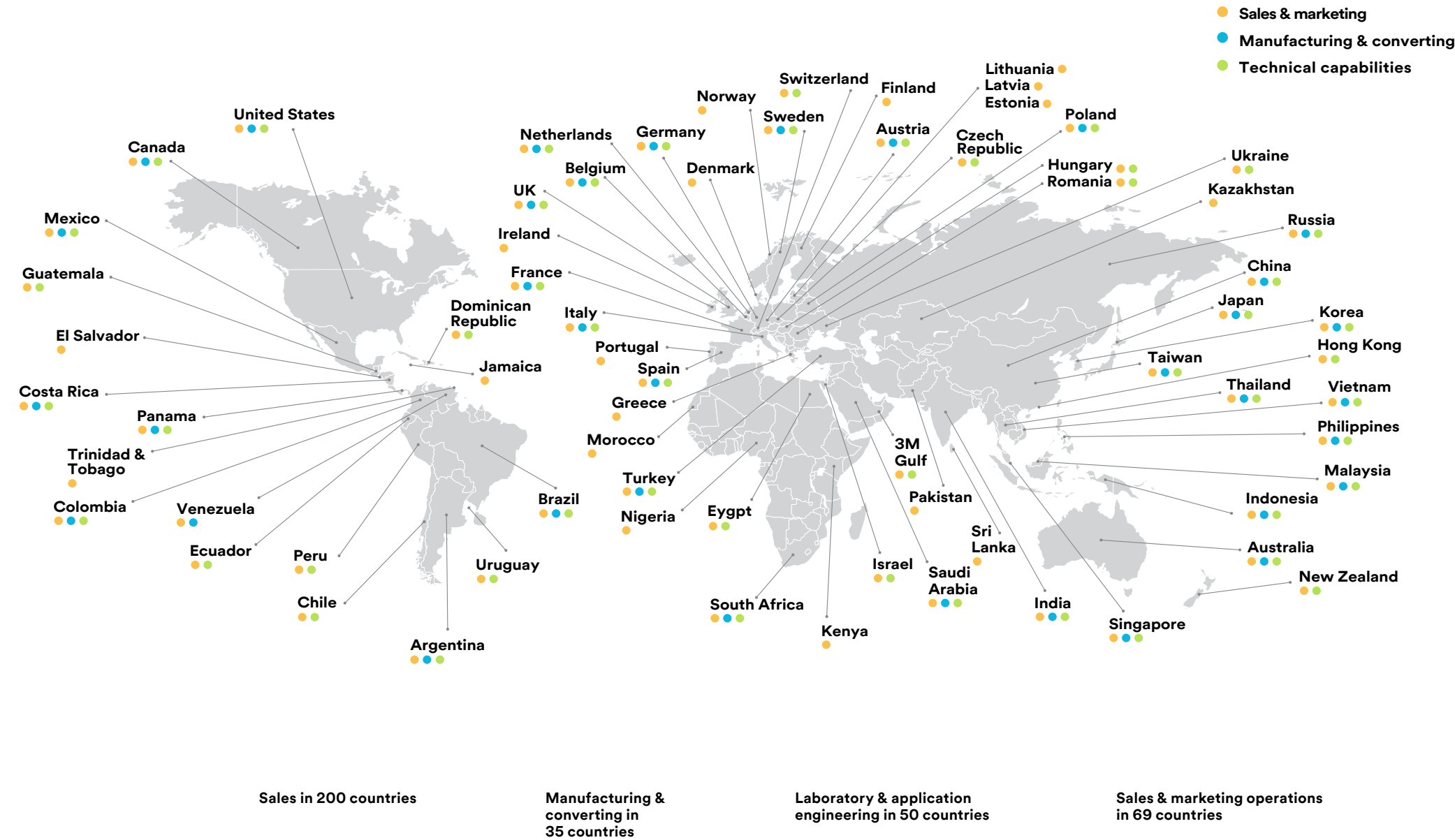
## Great brands are based on an enduring idea that drives their purpose.

At 3M, we apply science to improve people’s everyday lives.

But just as society’s problems continue to evolve, so does our science. We are relentlessly evolving and adapting our technology to continue to help people by solving their problems of today and tomorrow.

Our 46 technology platforms, the 3M periodic table of elements, showcase the building blocks of 3M. They are elements of progress. Alone, they are each unique. Combined, we make solutions for our customers.

# Global capabilities



The 3M periodic table will evolve to assure future-forward technologies aligned with our strong foundational expertise. This includes our commitment and expertise in making products with less materials, improving ours and others' environmental footprint, and emphasizing our use of science to create a more positive world.

## Unique and differentiated value

The power of 3M is in the way we connect our fundamental strengths to customers. Those strengths are our capabilities and brand. They define us as an enterprise and combine to build a business greater than the sum of its parts. The power of 3M arose from our deep understanding of what it is that differentiates us in our performance, across every business in our enterprise. It truly reflects how we’re linked together in our portfolio even though we might operate in multiple markets. It’s about our technology, but not just standalone science: It’s technology supported by deep intellectual property and combined with multiple other technologies to enable us to do unique things with and for our customers.



3M power is also about our manufacturing strength. We're differentiated and advantaged in the marketplace through in-house 3M plant and facility ownership that also leverages 3M intellectual property. A third of our intellectual property sits in manufacturing, much of it in trade secrets, enabling us to deliver higher-quality, better-performing, more competitive products in the marketplace.

True global capabilities require more than just presence in international markets. They require the skills of our international organization to execute our business models and enable us to enter those markets successfully — to take our fundamental strengths and applications almost anywhere in the world. We have sales in nearly all countries, with two-thirds of our workforce and sales professionals working outside the U.S. By employing integration and collaboration across our businesses, geographies, and scientific disciplines we effectively and efficiently bring new ideas and products from the lab to the factory to customers' homes and businesses everywhere.

And finally, it's our brand, 3M Science. Applied to Life™, that

adds value to every one of our businesses across all our markets.

Leveraging these fundamental strengths — technology, manufacturing, global capabilities, and brand — is truly what creates the power of 3M.

Leveraging strategic partnerships

3M is able to transform diverse ideas and creativity into superior technologies, business assets, and innovative product platforms.

One of many things that makes 3M a singular company is our commitment to collaboration. There are no silos here. We collaborate with each other. Across businesses. Across technologies. Across oceans and continents.

Case in point: the 3M Tech Forum, a self-directed and self-organized catalyst for the 10,000-plus people in 3M's technical community. Begun more than 60 years ago, the Tech Forum gives 3M researchers the opportunity to compare notes with global colleagues, collaborate around the company's [46 technology platforms](#), and develop new

ideas that fuel the 3M innovation pipeline. The collaborating takes place at an annual global event, spring symposiums, recognition programs, and many chapter events held throughout the year. Included among our Tech Forum chapters are the Global Product Stewardship, Green Chemistry, and Climate chapters.

Additional information on open innovation at 3M can be found in [our customer section](#).

Discovering what the world thinks of science

At 3M, science is important to us. It's what fuels our Vision: technology improving every company, products enhancing every home, and innovation improving every life. But we also believe it's important to understand what the world thinks of science — if people outside our organization are unaware of it, if they are indifferent to its presence around them, or if they see, feel, and appreciate its impact. Since we couldn't find the answers elsewhere, we conducted our own research in 2018 to get them. The results are in the 3M State of Science

Index, and they are compelling. Discover what we found out about the image of science, along with revelations and insights from people around the world, [here](#).

A process that's built for innovation

The strength and uniqueness of 3M is our ability to combine and evolve multiple technologies from our [46 platforms](#) to serve the very different and changing needs of our markets.

Our scientists around the world share and combine these technologies across all our businesses to invent and manufacture cutting-edge products. These technology platforms are owned by the company. Development teams within each of our businesses and corporate research laboratories draw from these technologies to develop unique solutions for their customers and markets.

New-to-the-world processes are developed primarily in 3M's Corporate R&D Process Laboratory, and the development of these new processes are captured in our New Technology Introduction (NTI) framework:

- Explore: Identify the market opportunity
- Qualify: Identify superior product concepts to meet customer needs
- Deploy: Develop the technical solution

Meanwhile, our New Product Introduction (NPI) process provides the robust framework for developing products from idea to launch.

Together, 3M's NTI and NPI processes provide a common framework for technology and product commercialization for all global business. Information is required at every step, or gate, in the process, along with deliverable tasks. Having consistent practices throughout the company for technology and product creation assists in risk analysis by providing a common language from which to share tools and best practices and manage project portfolios.

3M's fundamental strengths



Technology

Ability to share and combine elements of 3M's broad technology portfolio to produce unique, differentiated products, translating to premium margins.



Manufacturing

Utilization of 3M manufacturing footprint and technology, including process trade secrets, leading to higher-performing products and lower unit costs.



Global capabilities

Subsidiary front and back office footprint that allows for the effective development, adaptation, and commercialization of products.



Brand

Brand equity in the 3M brand and in strategic brands that is shared across business groups.

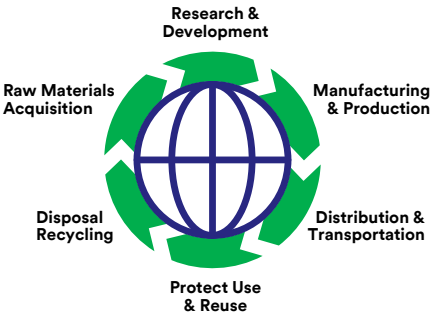
## Product innovation that takes the long view

3M works to produce products with superior environmental performance across their entire life cycle. We also work with our suppliers and business partners so that their operations support these same objectives. These efforts together help define, protect, and assure the long-term success of our company.

Life cycle management (LCM) is 3M’s approach to assuring that EHS and associated regulatory considerations are integrated into the development and commercialization of 3M products through 3M’s NPI process. During NPI, our business teams provide LCM deliverables. These include, at a minimum, raw material composition; assessments in human health and environmental toxicology, electrical and mechanical safety, and other disciplines, as appropriate; conformance to regulatory and customer EHS requirements; and hazard communication documents.

Likewise, we evaluate LCM impacts from product modifications through

our corporate Management of Change (MOC) process. We leverage these LCM processes to continuously improve the EHS performance of our products.



## A product stewardship framework that continues to advance

Responsibility for product stewardship at 3M is shared across a broad spectrum of functions positioned within businesses, regions, and corporate staff groups. Together, individuals across this spectrum work to support 3M’s core value of respect for our social and physical environment.

Product responsibility liaisons (PRLs), or product stewards, embedded within 3M businesses and countries of operation, act as champions of product EHS,

regulatory compliance, and Sustainability. They help assure our products meet or exceed requirements stemming from 3M policies, governmental regulations, and from our customers.

Our framework for product stewardship provides structure and consistency for overseeing daily activities in a proactive, not reactive, mode. We have a long-existing process for tracking potential and near-miss incidents and a self-auditing program to identify leading indicators instead of waiting until non-compliance.

3M has been on the leading edge of product stewardship audits, beginning with self-assessments in international regions in 2007, and incorporating global on-site audits in 2014. These audits evaluate, among other elements, product hazard and risk assessment, chemical control, life cycle management, and consumer product safety. The goal of these audits is to assure that regions and business groups are meeting corporate standards, and to share best practices globally.

In May of 2018, over 150 3M product stewardship professionals from across the globe came

together for a week-long product stewardship conference with workshops, customer presentations, external speakers, executive panels, and training. The main objectives included:

- Advancing “customer first” objectives and processes within the global product stewardship organization
- Informing the redesign of the LCM process and systems to improve customer response, standardize processes, and gain productivity
- Sharing solutions from country to country for addressing product stewardship challenge areas
- Raising global competency levels through training and workshops, with a focus on LCM and regulatory advocacy
- Advancing the role of product stewardship in Sustainability

3M values the continued professional development of its product stewardship professionals. In addition to conducting the Global Product Stewardship Conference and supporting attendance at a wide variety of external classes and conferences, we offer an internal education program

covering regulatory, policies and standards, toxicology, systems and business processes, and orientation to product responsibility. In 2018, the Corporate Product Stewardship Department offered 21 live programs and 46 on-demand sessions to the product stewardship network. The corporation also sponsors a 700-page website dedicated to product stewardship and global regulatory requirements, and we publish a monthly global newsletter to keep the network informed of recent and upcoming regulatory and program changes.

## Life cycle assessments (LCA), where relevant and feasible

In addition to the LCM program, which applies to all 3M products, we also complete ISO 14040-compliant LCAs for select 3M products. At 3M, we primarily complete cradle-to-gate LCAs, since the majority of our products have use and disposal life cycle stages that are difficult to characterize. We also complete cradle-to-gate LCAs for a number of internally produced chemicals that are used in the manufacturing of 3M products.

While it is not possible to complete full LCAs for all 55,000-plus unique 3M products, evaluation of these intermediates allows us to better understand the potential environmental impacts of key components and processes.

In 2018, 3M LCA teams in the U.S. and Europe renewed their process certifications from The International EPD® System to demonstrate that appropriate procedures are in place to produce scientifically sound, technically defensible LCAs and EPDs (Environmental Product Declarations). Rather than conduct independent third-party reviews for each individual product LCA or EPD, the teams will continue to undergo an annual recertification process that evaluates conformance of the underlying management system with the program rules and ISO standards. This global certification of the LCA process for multiple parts of our organization is thought to be the first of its kind.

For our customer greenhouse gas reduction (GHG) 2025 goal, we realize we can make far greater contributions by helping our customers reduce their GHG emissions through use of our products. To calculate these emission reductions, our process



is based on life cycle thinking and the ISO 14064-2 standard for comparing emissions from the project scenario against a baseline scenario. Additional details of these efforts can be found in the [climate and energy section](#) of this report.

**Life cycle approach in packaging design**

In 2018, we continued our long-standing commitment to efficient packaging design. Over the last five years, globally, we have reduced designed packaging weight by more than 13,700 metric tons.

Support for better packaging solutions starts early at 3M via engagement with our NPI and LCM processes. In an effort to help 3M employees design packaging using a life cycle approach, a new model was deployed in 2018. Over 120 packaging designs were evaluated using a streamlined LCA. Three separate projects alone — returnable packaging, reusable packaging, and lighter-weight pallets — will reduce an estimated 7,700 metric tons of CO<sub>2</sub>, reinforcing our commitment to climate health.

An important part of our packaging Sustainability roadmap is internal

and external advocacy of packaging Sustainability. For example, 3M Canada Strategic Sourcing and Packaging Solutions continues to serve as an advocacy model, hosting their 12<sup>th</sup> annual supplier and vendor Sustainability fair at the 3M London, Ontario, location. For the second year in a row, local high school students and teachers were also invited. The agenda also included community partners such as local municipal government, the local conservation authority, and non-governmental organizations showcasing their Sustainability programs.



**Looking forward**

In 2019, 3M will launch a new website within 3M.com to provide customers with complete ingredient information for over 600 consumer-formulated products. The website will include information on ingredient purpose and, if applicable, ingredient inclusion on chemical-of-concern lists.

We have a process that provides the robust framework for developing products from idea to launch. Starting in 2018, and continuing deployment through 2019, we are building on our existing framework for new product introduction through a new system called 3M|Grow. As part of this new framework, we’re updating task and deliverables for the process to align with our Sustainability Value Commitment.

We will finalize our packaging Sustainability roadmap, firmly built within the “Science for Circular” aspiration, and progressively roll out prioritized targets. Our roadmap will necessitate further collaboration with key suppliers and internal stakeholders to identify and explore sustainable packaging opportunities and technologies, including migration from fossil-fuel-based plastic feedstocks toward renewable plastic feedstock, and to increase the recycled content of our packaging materials.



# Our products

## Stepping up Sustainability in 2019, and beyond.

### Our commitment

At 3M, we bring all of our product solutions to different markets through our five business groups — sharing technology, manufacturing, marketing, and other resources to increase our speed and efficiency.

What’s more, as of December 5, 2018, every 3M business group shares another powerful bond.

On that day, at the National Climate Change Conference (COP24), we announced that 100 percent of our new products will be required to have a [Sustainability Value Commitment](#) demonstrating how they drives impact for the greater good.

This formal requirement, which goes into effect in 2019, is significant because it embeds Sustainability into the pipeline that produces 3M's diverse

global products. A significant fraction of the company’s annual sales come from products created in the past five years.

Examples of a Sustainability Value Commitment in new 3M products include recyclability, energy and water savings, responsible sourcing, renewable materials, and appropriate reuse of a product. Also included will be products whose core purpose is helping to solve an environmental and/or social problem. For example: improving air quality, reducing greenhouse gas emissions, improving patients outcomes, and enhancing worker safety in industrial settings.

3M’s new product requirement will have a global impact, starting in the 70 countries where we operate and in the products we sell in nearly every country. It will also help our customers reach

their own Sustainability goals.

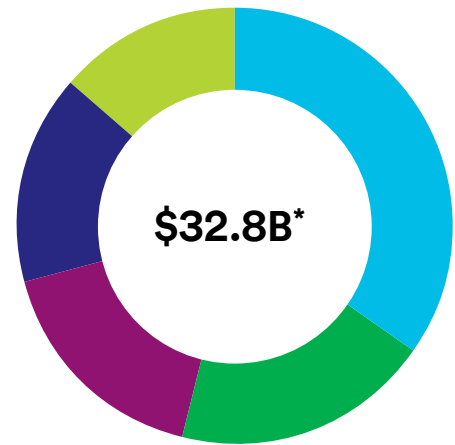
Most important, it impacts 3M employees. When you work for 3M, you are changing the world.

It’s another important step forward in our ambition to apply science to improve every life, through our three aspirations (Science for Circular, Science for Climate, and Science for

### Our actions

In 2018, we delivered organic growth of more than three percent with growth across all business groups and geographic areas. We also delivered record sales of \$32.8 billion.

3M 2018 net sales



Consumer	\$4.80B
Electronic & Energy	\$5.47B
Health Care	\$6.02B
Industrial	\$12.3B
Safety & Graphics	\$6.83B

\*In addition to our five business groups, \$32.8B includes elimination of dual credit, and corporate and unallocated business segments.

# Consumer

2018 sales:  
**\$4.80B**

Our markets

Consumer Health Care	\$0.389B
Construction and Home Improvement	\$1.96B
Home Care	\$1.01B
Stationary and Office Supplies	\$1.38B

## Bringing 3M to the hearts and minds of customers

Our business focus

Supplying an array of innovative products that keep homes cleaner, offices organized, and buildings well-maintained, our Consumer Business Group is home to some of our most iconic brands, including Post-it®, Scotch®, Scotch-Brite™ products, Filtrete™, Nexcare™, and Command™. These products simplify managing a home or a business, and make lives a little easier and more efficient.

### Some Sustainability examples

- According to the World Health Organization (WHO), 93 percent of the world’s children under the age of 15 years breathe air that is so polluted that it puts their health at risk. To address this issue, 3M has launched our first children’s small respirator with a valve designed for ages seven to 12. This product combines low breathing resistance with comfort and design

while helping protect children from potentially harmful effects of air pollution. Learn more [here](#)

- [Post-it® Super Sticky Notes](#) have extra sticking power so your message can stay front and center. These notes are now available in a fun cube format featuring 360 sheets. This product is made in a zero-waste-to-landfill plant. In addition, to lessen our dependence on fossil fuels, this product is made with a plant-based adhesive (67 percent by weight), and the product is also recyclable
- Our new [Filtrete™ Room Air Purifiers](#) help capture 99.97 percent of airborne particles such as dust and lint, mold spores, bacteria, and pet dander with a Filtrete™ True HEPA filter.<sup>1</sup> Several of these devices have also earned ENERGY STAR® certification. ENERGY STAR® certified room air purifiers are 40 percent more energy efficient than standard models. Learn more [here](#)

Learn more on our Consumer Business Group by visiting our 3M Investor Day [presentation and recording](#).

<sup>1</sup>As small as 0.3 microns, from the air passing through the filter media. Initial efficiency value

# Electronics & Energy

2018 sales:  
**\$5.47B**

Our markets

Electronics	\$3.97B
Energy	\$1.49B

## Advancing a connected world

Our business focus

At 3M Electronics & Energy we help our clients make the impossible possible. Our people lead innovation through developing new applications and technologies that help customers solve their most challenging problems. We are on the leading edge of building new platforms in emerging, high-growth electronics market segments like data centers, grid modernization, and automotive electrification. We create solutions that power and connect cities, homes, cars, and people and provide real-time access to data, wherever it’s needed.

### Some Sustainability examples

- Light-redirecting films, tapes, and materials that enable high-efficiency solar panels
- Wind protection tapes that help improve turbine uptime
- Cable accessories that enable reliable power generation

Learn more on our Electronics & Energy Business Group by visiting our 3M Investor Day [presentation and recording](#).

# Health Care

2018 sales:

\$6.02B

Our markets

Medical Solution	\$3.05B
Oral Care	\$1.35B
Health Information	\$0.837B
Drug Delivery	\$0.444B
Food Safety	\$0.332B

Helping health care professionals prevent complications and improve patient outcomes

Our business focus

Our Health Care Business Group is a global leader in medical and oral care products, drug delivery systems, health information systems, and food safety systems — supplying advanced solutions that help health care professionals improve the quality and effectiveness of care for millions of people while managing overall costs.

Some Sustainability examples

- 3M™ Petrifilm™ Plates compared with traditional agar test methods offer users up to a 66 percent reduction in waste, use up to 76 percent less energy, up to 79 percent less water, and reduce greenhouse gas emissions up to 75 percent
- Five 3M Health Care manufacturing sites have achieved zero-landfill-waste status
- We developed a partnership with World Dental Federation on implemented [Smiles Around the World](#) program in China to promote lifelong oral health

Learn more on our Health Care business group by visiting our 3M Investor Day [presentation and recording](#).

# Industrial

2018 sales:

\$12.3B

Our markets

Adhesive and Tapes	\$4.61B
Automotive and Aerospace	\$2.06B
Abrasives	\$1.80B
Automotive Aftermarket	\$1.64B
Advance Materials	\$1.24B
Separation and Purification	\$0.913B

Advancing industry performance

Our business focus

Using a transformed approach to customer engagement, our Industrial Business Group provides thousands of innovative solutions and products. You can find our products bonding and protecting surfaces in construction; improving the design and maintenance of land, air, and water transportation; and purifying air and water for both residential and industrial uses.

Some Sustainability examples

- Light weighting vehicles for fuel efficiency
- Adopting reduced-solvent and solvent-free adhesives
- Cutting faster, which creates significant ergonomic and productivity gains

Learn more on our Health Care Business Group by visiting our 3M Investor Day [presentation and recording](#).



# Safety & Graphics

2018 sales:  
**\$6.83B**

**Our markets**

**Personal Safety**      \$3.68B

**Commercial Solutions**      \$1.84B

**Transportation and Safety**      \$0.95B

**Roofing Granules**      \$0.353B

**Advancing safety, enhancing environments, improving lives**

**Our business focus**

From personal protective equipment (PPE) that protects people at home and work, to traffic signs and pavement markings that improve road safety, and exterior signage and interior graphics that enhance the impact of visual and design communication, our Safety & Graphics Business Group exists to make the world a more secure and more productive place to live and work.

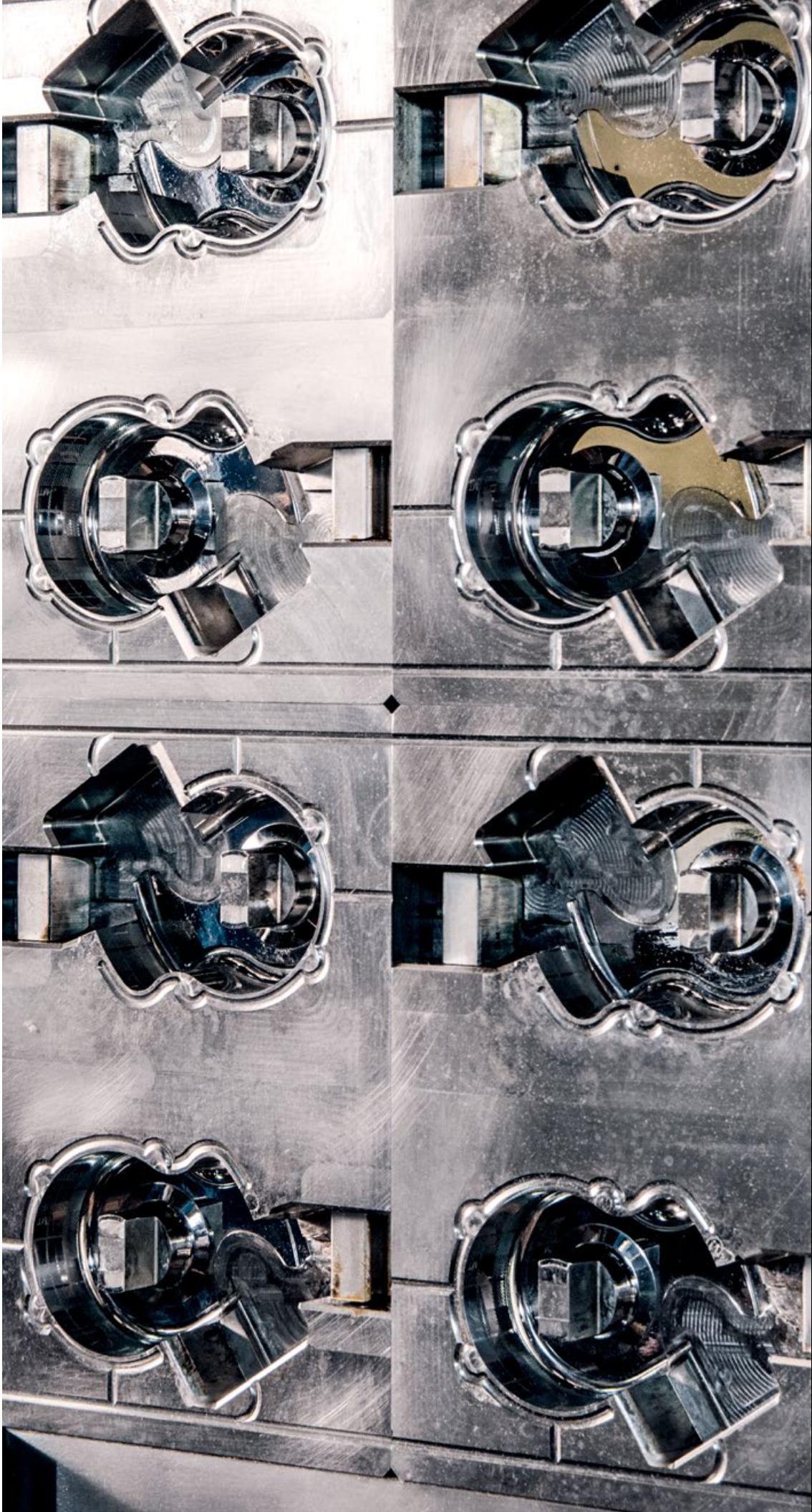
**Some Sustainability examples**

- Energy-saving window films
- Water and chemical waste-reducing cleaning solutions
- Roofing granules that harness the power of the sun to improve air quality

Learn more about our Health Care Business Group by visiting our 3M Investor Day [presentation and recording](#).

**Looking forward**

Beyond financial results, in 2018 we continued to position 3M for long-term growth and value creation. This includes executing our four priorities: portfolio management, transformation, innovation, and people and culture, as discussed in this report's [3M Value Model](#) and [our customer sections](#).



# About report

Report scope and boundaries	220
Indices to GRI and UNGC	226
Assurance statement	244
Metric tables	250



# About report, scope, and boundaries

## Report schedule and period.

**Current issue:** May 14, 2019

**Next issue:** Scheduled for May 2020

**Previous issue:** May 8, 2018

Before 2010, the Sustainability Report was a fully integrated website. Therefore, copies before 2010 are not available.

This report provides a summary of the activities in fiscal year 2018 (January 1, 2018, to December 31, 2018).

## Organizational boundaries

This report covers 3M’s owned manufacturing facilities and leased facilities worldwide, including joint ventures (if greater than 50 percent 3M ownership) and partially owned subsidiaries (if greater than 50 percent 3M ownership) where 3M has full operational control. Acquisitions are included in data sets once legally owned and fully integrated onto 3M systems. All data included in the report is global data unless otherwise specified. Any significant organization changes are identified in the [Annual Report 2018](#) and 2019 Notice of [Annual Meeting & Proxy statement](#).

## Data collection, adjustments, and verification

The data provided in this report through facts and figures is based on activities during 3M’s fiscal year 2018. For some performance indicators, the previous year’s data are provided to allow for annual comparisons.

## Report data collection

Due to the size and geographical extent of our operations, it is at times difficult to obtain all data points. Therefore, to the extent possible, limitations and assumptions are stated as information in the report. This report’s data has been reviewed for accuracy and completeness, including the reliability of the systems used to obtain the data.

Unless noted below, corporate staff have also verified the implementation of policies and management systems through audits and self-reporting systems.

- **Financial data:** Financial information referenced in this report is collected and reported in accordance with the United States Securities and Exchange Commission through the Annual Report 2018

- **Environmental, health, and safety (EHS) data:** The EHS data in this report is related to environment, safety performance, management systems, implementation, and regulatory compliance. Data collection systems are in place at applicable sites to track and collect environmental, health and safety data through corporate-wide EHS reporting systems (e.g., Environmental Targets Database, Worldwide Incident Management System, etc.)

- **Social data:** The data related to employee metrics, metrics, social practices, and community programs has been derived from various databases from within the Human Resources and 3Mgives organizations. This data has been reviewed and verified by the departments responsible for maintaining the internal reporting systems

- **Responsible sourcing systems and data:** The policies and management systems implementation in this area have been reviewed and verified by the departments responsible for maintaining the internal reporting systems

Sites acquired by 3M are integrated into 3M programs and reporting systems via a prioritized functional integration schedule. Timeframe for integration varies depending on subject-matter reporting requirements and site systems before being acquired; however, on average, integration ranges between one and three years.

## Base year and other adjustments

3M’s Annual Report 2018 and [Investor Relations](#) website document any changes to financial data. Several of 3M’s environmental goals are normalized per net sales. 3M does not adjust sales data for inflation.

3M generally does not adjust its base-year environmental metrics data to reflect changes in 3M’s organizational structure. As a result, 3M sets environmental targets that are normalized or indexed to



production (tons emitted or net sales) to assure the environmental progress we report to the public is not unduly influenced by changes to our organizational structure. However, in the case of our greenhouse gas emissions data, 3M follows the World Resource Institute (WRI) and World Business Council for Sustainable Development (WBCSD) GHG Protocol. Consequently, we readjust our greenhouse gas emissions base-year data in the case of business acquisitions and divestitures.

Whenever feasible, 3M adjusts base-year and other years’ data if data collection methods change or data errors are identified. Any significant changes in the measurement methods and/or data values applied to key environmental metrics from previous years are disclosed in the report. Significant changes are defined by this Sustainability Report as changes greater than 5 percent of the original data point.

Between 2005 and 2010, 3M adopted a holistic definition of waste to drive the company’s waste reduction efforts toward more sustainable solutions, such as pollution prevention. 3M’s waste reduction goal and progress during

this period included recycling. In 2011, 3M returned to a more conventional definition of waste that considered recycling as neutral (contributing neither toward total waste nor toward good output).

3M’s 2025 Sustainability Goals utilize 2015 as the base year. Starting with this program, waste disposed and waste by disposal type do not include waste-to-energy. Total hazardous and total non-hazardous include waste-to-energy.

For this year’s report, we identified an opportunity in last year’s (2017 reporting year) process used to identify manufacturing facilities for a portion of our greenhouse gas emissions (GHG). In 2018, and moving forward, facility classification will better align to our 2002 inventory. This change impacted calculation methodologies for energy and waste GHG estimations. Therefore, limiting direct comparability of Scope 1, 2, and Scope 3 category 5 between reporting year 2017 and 2018. For this reason, reporting years 2017 and 2018 Scope 1 and 2 GHG emissions year-on-year comparison should be viewed as an estimate. The 2018 GHG

inventory is fully comparable with baseline year 2002.

In addition, we identified an input change for our Scope 3 category 6, emissions from business travel. Input data formerly used was no longer available from one of our vendors. For calculation of these emissions, a new input was available covering reporting years 2016 to 2018. This change in methodology was used to calculate values listed in this year’s report and reviewed by Bureau Veritas during our corporate assurance visit. Previously reported Scope 3 category 6 emissions should no longer be used for reporting comparison.

Data verification

**Internal verification:** 3M has conducted an internal verification of the information provided in this report. The objectives for our assurance process included:

- Accuracy and completeness of data
- Reliability of systems used to measure and record data
- Reliability of ratios compiled from underlying data

- Adherence to the GRI Standards
- Implementation of internal policies and related management systems as reported
- Presentation of a complete and fair picture in the report as a whole

**Third-party verification:** Bureau Veritas [“Assurance Provider”] provided independent third-party assurance for this report covering activities January 1, 2018, to December 31, 2018. Bureau Veritas provided moderate-level of assurance in accordance with AA100AS-2008, Type 2. Bureau Veritas’ assurance letter can be found in the report under [Assurance Statement](#).

Global principles and guidelines  
Global Reporting Initiative

The Global Reporting Initiative (GRI) is a network-based organization that includes representatives

from business, government, labor, third-party advocacy groups, and academia. The GRI organization has developed a framework for Sustainability reporting. Following the GRI Sustainability framework advances two important objectives: transparency and the ability to compare results from one organization to another. 3M has developed this report using GRI Standards. The following GRI Index outlines where specific GRI reporting elements and indicators are addressed in the report or other reporting sources, including the Annual Report 2018, 2019 Notice of Annual Meeting & Proxy, and/or other noted sources on 3M’s Investor Relations website.

Our material aspects are identified in the [GRI Index](#) and reflected in our 2025 goals, with focus on raw materials, water, climate and energy, health and safety, and education and development. 3M self-declares this report, has been prepared in accordance with the GRI Standards: Comprehensive option.

United Nations Global Compact (UNGC) Communication on Progress (COP)

The UNGC is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. 3M committed to the UNGC principles in early 2014. This report includes an index of our COP implementing the 10 principles as well as alignment with the United Nations 2030 Sustainable Development Goals (SDGs) within the content of this 2019 Sustainability Report.

Sustainability Accounting Standards Board (SASB)

For our Sustainability reporting strategy, we utilize multiple tools and frameworks to assure we are objective, transparent, and globally relevant in our public reporting process. This includes [GRI](#), [SASB](#), and the [SDGs](#).

With corporate operations in 70 countries and sales in nearly all countries, our strategy is designed to be holistic. GRI was selected as the primary source referenced due to the global reach of the standard.

For SASB, our diversity of operations would not be represented by their [current industry standard classifications](#); 3M is grouped as a primary SISC Sector: Resource Transformation, primary SICS Industry: Containers & Packaging. Using 46 technology platforms, our integrated team of scientists and researchers works with customers to create breakthroughs via our Consumer, Electronics & Energy, Industrial, Health Care, and Safety & Graphics business groups.

In this year’s report, we detail our efforts on our 2018 materiality assessment. Before conducting this assessment, we reviewed and integrated SASB’s approach to materiality and materiality map to help prioritize the most important focus areas.

UNGC Principles and 2030 SDGs

Refer to the GRI Index table for cross-references of content in this report with the 10 Principles of the UNGC, and alignment with the 2030 SDGs.

Contact 3M

It is through collaboration and partnerships that 3M can accelerate Sustainability in our company to improve every life. You can contact 3M Sustainability at [Sustainability@mmm.com](mailto:Sustainability@mmm.com).

# GRI index

## Global Reporting Initiative (GRI) content index and UN Global Compact Communication on Progress



UN GLOBAL COMPACT

COMMUNICATION ON PROGRESS

This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

### General Standard Disclosure

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
GRI 102: General disclosures, organization profile				
102-1	Name of the organization	3M Company		
102-2	Activities, brands, products, and services	<a href="#">Our products</a> <a href="#">Annual Report</a> , 10-K, pages 4-6	<a href="#">210</a>	
102-3	Location of headquarters	3M Company 3M Center St. Paul, Minnesota, 55144-1000, United States		
102-4	Location of operations	Operations in 70-plus countries  <a href="#">Innovation management</a> Names of countries, <a href="#">3M.com</a>  <a href="#">Annual Report</a> , 10-K, page 127	<a href="#">198</a>	
102-5	Ownership and legal form	<a href="#">Annual Report</a> , 10-K, page 4		
102-6	Markets served	<a href="#">Our customers</a>  <a href="#">Our products</a>  <a href="#">3M.com</a>  <a href="#">Annual Report</a> , 10-K, pages 4-6	<a href="#">192</a>  <a href="#">210</a>	
102-7	Scale of the organization	<a href="#">Employee programs</a>  <a href="#">Metric tables</a> : historical metrics; social performance, employee and financial performance  <a href="#">Annual Report</a> , 10-K, pages 4-6	<a href="#">124</a>  <a href="#">250</a>	
102-8	Information on employees and other workers	<a href="#">Employee programs</a>  <a href="#">Health and safety</a>  <a href="#">Metric tables</a> : social performance, employees  <a href="#">Annual Report</a> , 10-K, page 4	<a href="#">124</a>  <a href="#">136</a>  <a href="#">250</a>	UNGC Principle 6 SDG 8
102-9	Supply chain	<a href="#">Suppliers</a>	<a href="#">176</a>	
102-10	Significant changes to the organization and its supply chain	<a href="#">Annual Report</a> , 10-K, pages 73-76  <a href="#">Suppliers</a>	<a href="#">176</a>	



Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
102-11	Precautionary principle or approach	<a href="#">Global challenges</a>	<a href="#">52</a>	UNGC Principle 7
		<a href="#">Environmental management</a>	<a href="#">142</a>	
		<a href="#">Innovation management</a>	<a href="#">198</a>	
102-12	External initiatives	<a href="#">Global challenges</a>	<a href="#">52</a>	
		<a href="#">Human rights</a>	<a href="#">110</a>	
102-13	Membership associations	<a href="#">Global challenges</a>	<a href="#">52</a>	
GRI 102: General disclosures, strategy				
102-14	Statement from senior decision-maker	<a href="#">Message from our Chief Executive Officer</a>	<a href="#">4</a>	
102-15	Key impacts, risks, and opportunities	<a href="#">Message from our Chief Executive Officer</a>	<a href="#">4</a>	
		<a href="#">Global challenges</a>	<a href="#">52</a>	
GRI 102: General disclosures, ethics and integrity				
102-16	Values, principles, standards, and norms of behavior	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	SDG 16
		<a href="#">Compliance and Business Conduct at 3M</a>		
102-17	Mechanisms for advice and concerns about ethics	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	SDG 16
		Report a concern or ask a <a href="#">question</a>		
GRI 102: General disclosures, governance				
102-18	Governance structure	<a href="#">Corporate governance</a>	<a href="#">88</a>	
102-19	Delegating authority	<a href="#">Corporate governance</a>	<a href="#">88</a>	
102-20	Executive-level responsibility for economic, environmental, and social topics	<a href="#">Corporate governance</a>	<a href="#">88</a>	
102-21	Consulting stakeholders on economic, environmental, and social topics	<a href="#">Global challenges</a>	<a href="#">52</a>	SDG 16
102-22	Composition of the highest governance body and its committees	<a href="#">Corporate governance</a>	<a href="#">88</a>	SDG 5, 16
		<a href="#">3M Board of Directors</a>		
		<a href="#">3M Committee Composition</a>		
		<a href="#">2019 Proxy Statement</a> , page 14-19, 34-38		

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
102-23	Chair of the highest governance body	Michael F. Roman Chief Executive Officer	<a href="#">4</a>	SDG 16
		<a href="#">Corporate governance</a>	<a href="#">88</a>	
102-24	Nominating and selecting the highest governance body	<a href="#">Corporate governance</a>	<a href="#">88</a>	SDG 5, 16
		<a href="#">Nominating and Governance Committee Charter</a>		
102-25	Conflicts of interest	<a href="#">Corporate governance</a>	<a href="#">88</a>	SDG 16
		<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	
		<a href="#">3M Company Code of Business Conduct and Ethics for Members of the Board of Directors</a>		
102-26	Role of highest governance body in setting purpose, values, and strategy	<a href="#">Corporate governance</a>	<a href="#">88</a>	
		<a href="#">3M Corporate Governance Guidelines</a>		
102-27	Collective knowledge of highest governance body	<a href="#">Corporate governance</a>	<a href="#">88</a>	SDG 4
102-28	Evaluating the highest governance body's performance	<a href="#">Corporate governance</a>	<a href="#">88</a>	
		<a href="#">Nominating and Governance Committee Charter</a>		
102-29	Identifying and managing economic, environmental, and social impacts	<a href="#">Corporate governance</a>	<a href="#">88</a>	SDG 16
		<a href="#">Global challenges</a>	<a href="#">52</a>	
102-30	Effectiveness of risk management processes	<a href="#">Corporate governance</a>	<a href="#">88</a>	
		<a href="#">Enterprise risk</a>	<a href="#">96</a>	
102-31	Review of economic, environmental, and social topics	<a href="#">Corporate governance</a>	<a href="#">88</a>	
102-32	Highest governance body's role in sustainability reporting	<a href="#">Corporate governance</a>	<a href="#">88</a>	
102-33	Communicating critical concerns	<a href="#">Corporate governance</a>	<a href="#">88</a>	
102-34	Nature and total number of critical concerns	Confidentiality constraints, this information is considered business confidential; critical concerns would be taken into consideration during our enterprise risk management initiative: see enterprise risk for additional information on our mechanism used to address and resolve critical issues.		
		<a href="#">Annual Report</a> , 10-K, pages 10-12		
102-35	Remuneration policies	<a href="#">Compensation Committee Charter</a>		
		<a href="#">Compensation</a>	<a href="#">120</a>	
102-36	Process for determining remuneration	<a href="#">2019 Proxy Statement</a> , pages 11-12, 26, 39-41, and 46-64		
		<a href="#">Compensation Committee Charter</a>		
		<a href="#">Compensation</a>	<a href="#">120</a>	
		<a href="#">2019 Proxy Statement</a> , pages 11-12, 26, 39-41, and 46-64		

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
102-37	Stakeholders' involvement in remuneration	<a href="#">Compensation Committee Charter</a> <a href="#">Compensation</a> <a href="#">2019 Proxy Statement</a> , pages 11-12, 26, 39-41, and 46-64	<a href="#">120</a>	SDG 16
102-38	Annual total compensation ratio	<a href="#">2019 Proxy Statement</a> , page 82		
102-39	Percentage increase in annual total compensation ratio	Not applicable, disclosure does not cover the specific impacts that make the topic material. 3M has an established process to assure our commitment to fair and equitable pay. The breakdown to calculate the median percentage increases does not accurately reflect our workforce levels and process at 3M to assure equitable remuneration. Additional details on our process can be found in Compensation and Employee Programs; <a href="#">Compensation Committee Charter</a>		
GRI 102: General disclosures, stakeholder engagement				
102-40	List of stakeholder groups	<a href="#">Global challenges</a>	<a href="#">52</a>	
102-41	Collective bargaining agreements	<a href="#">Human rights</a>	<a href="#">110</a>	UNGC Principle 6 SDG 8
102-42	Identifying and selecting stakeholders	<a href="#">Global challenges</a>	<a href="#">52</a>	
102-43	Approach to stakeholder engagement	<a href="#">Global challenges</a>	<a href="#">52</a>	
102-44	Key topics and concerns raised	<a href="#">Global challenges</a>	<a href="#">52</a>	
GRI 102: General disclosures, reporting practices				
102-45	Entities included in the consolidated financial statements	<a href="#">Annual Report</a> , 10-K, pages 4-10 and 74-79 <a href="#">About report</a>	<a href="#">220</a>	
102-46	Defining report content and topic boundaries	<a href="#">Global challenges</a> <a href="#">About report</a>	<a href="#">52</a> <a href="#">220</a>	
102-47	List of material topics	<a href="#">Global challenges</a>	<a href="#">52</a>	
102-48	Restatements of information	<a href="#">About report</a>	<a href="#">220</a>	
102-49	Changes in reporting	<a href="#">About report</a>	<a href="#">220</a>	
102-50	Reporting period	<a href="#">About report</a>	<a href="#">220</a>	

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
102-51	Date of most recent report	<a href="#">About report</a>	<a href="#">220</a>	
102-52	Reporting cycle	<a href="#">About report</a>	<a href="#">220</a>	
102-53	Contact point for questions regarding the report	<a href="#">About report</a> <a href="mailto:Sustainability@mmm.com">Sustainability@mmm.com</a>	<a href="#">220</a>	
102-54	Claims of reporting in accordance with the GRI Standard	<a href="#">About report</a>	<a href="#">220</a>	
102-55	GRI content index	<a href="#">Indices to GRI and UNGC</a>	<a href="#">226</a>	
102-56	External assurance	<a href="#">Assurance statement</a>	<a href="#">244</a>	
Topic specific standards, 200 economic				
Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
GRI 201: Economic performance				
103-1 to 103-3	Management approach disclosures	<a href="#">Annual Report</a> , 10-K, pages 10-12 and 15-51		
201-1	Direct economic value generated and distributed	<a href="#">Annual Report</a> , 10-K, pages 52-127 <a href="#">Metric tables</a> , historical metrics, and financial performance	<a href="#">250</a>	SDG 2, 5, 7, 8, 9
201-2	Financial implications and other risks and opportunities due to climate change	<a href="#">Climate and energy</a> <a href="#">Annual Report</a> , 10-K, page 10-12	<a href="#">160</a>	SDG 13
201-3	Defined benefit plan obligations and other retirement plans	<a href="#">Annual Report</a> , 10-K, pages 15-50 and 90		
201-4	Financial assistance received from government	3M did not receive any significant financial assistance from any government in 2018.		
GRI 203: Indirect economic impacts				
103-1 to 103-3	Management approach disclosures	<a href="#">Community</a>	<a href="#">64</a>	

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
203-1	Infrastructure investments and services supported	<a href="#">Community</a>	<a href="#">64</a>	SDG 2, 5, 7, 9, 11
203-2	Significant indirect economic impacts	<a href="#">Community</a>	<a href="#">64</a>	SDG 1, 2, 3, 8, 10, 17
GRI 205: Anti-corruption				
103-1 to 103-3	Management approach disclosures	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	
205-1	Operations assessed for risks related to corruption	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	SDG 16
205-2	Communication and training about anti-corruption policies and procedures	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	SDG 16
205-3	Confirmed incidents of corruption and actions taken	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	SDG 16
GRI 206: Anti-competitive behavior				
103-1 to 103-3	Management approach disclosures	<a href="#">Corporate Code of Conduct</a> <a href="#">Antitrust and Competition Principle</a>	<a href="#">100</a>	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	<a href="#">Antitrust and Competition Principle</a> <a href="#">Annual Report</a> , 10-K, pages 109-121		SDG 16
Topic specific standards, 300 environmental				
Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
GRI 302: Energy				
103-1 to 103-3	Management approach disclosures	<a href="#">Climate and energy</a>	<a href="#">160</a>	
302-1	Energy consumption within the organization	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, energy	<a href="#">160</a> <a href="#">250</a>	

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
302-2	Energy consumption outside of the organization	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : environmental performance, greenhouse gas	<a href="#">160</a> <a href="#">250</a>	
302-3	Energy intensity	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, energy	<a href="#">160</a> <a href="#">250</a>	
302-4	Reduction of energy consumption	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, energy	<a href="#">160</a> <a href="#">250</a>	
302-5	Reductions in energy requirements of products and services	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : environmental performance, greenhouse gas	<a href="#">160</a> <a href="#">250</a>	
GRI 303: Water				
103-1 to 103-3	Management approach disclosures	<a href="#">Water</a>	<a href="#">154</a>	
303-1	Water withdrawal by source	<a href="#">Water</a> <a href="#">Metric tables</a> : environmental performance, water	<a href="#">154</a> <a href="#">250</a>	
303-2	Water sources significantly affected by withdrawal of water	<a href="#">Water</a> <a href="#">Metric tables</a> : environmental performance, water	<a href="#">154</a> <a href="#">250</a>	
303-3	Water recycled and reused	<a href="#">Metric tables</a> : environmental performance, water	<a href="#">250</a>	
GRI 305: Emissions				
103-1 to 103-3	Management approach disclosures	<a href="#">Climate and energy</a>	<a href="#">160</a>	
305-1	Direct (Scope 1) GHG emissions	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, greenhouse gas	<a href="#">160</a> <a href="#">250</a>	
305-2	Energy indirect (Scope 2) GHG emissions	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, energy, and greenhouse gas	<a href="#">160</a> <a href="#">250</a>	
305-3	Other indirect (Scope 3) GHG emissions	<a href="#">Climate and energy</a> <a href="#">Metric tables</a> : environmental performance, energy, and greenhouse gas	<a href="#">160</a> <a href="#">250</a>	



Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
305-4	GHG emissions intensity	<a href="#">Climate and energy</a>	<a href="#">160</a>	
		<a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, greenhouse gas	<a href="#">250</a>	
305-5	Reduction of GHG emissions	<a href="#">Climate and energy</a>	<a href="#">160</a>	
		<a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, greenhouse gas	<a href="#">250</a>	
305-6	Emissions of ozone-depleting substances (ODS)	<a href="#">Climate and energy</a>	<a href="#">160</a>	
		<a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, air emissions	<a href="#">250</a>	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	<a href="#">Climate and energy</a>	<a href="#">160</a>	
		<a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, air emissions	<a href="#">250</a>	
GRI 306: Effluents and waste				
103-1 to 103-3	Management approach disclosures	<a href="#">Environmental management</a>	<a href="#">142</a>	
		<a href="#">Raw materials</a>	<a href="#">148</a>	
		<a href="#">Water</a>	<a href="#">154</a>	
306-2	Waste by type and disposal method	<a href="#">Environmental management</a>	<a href="#">142</a>	
		<a href="#">Raw materials</a>	<a href="#">148</a>	
		<a href="#">Metric tables</a> : historical metrics, environmental footprint; environmental performance, waste	<a href="#">250</a>	
306-3	Significant spills	<a href="#">Environmental management</a>	<a href="#">142</a>	
		<a href="#">Metric tables</a> : environmental footprint, environmental management	<a href="#">250</a>	
		<a href="#">Annual Report</a> , 10-K, pages 109-121		
GRI 307: Environmental compliance				
103-1 to 103-3	Management approach disclosures	<a href="#">Environmental management</a>	<a href="#">142</a>	
307-1	Non-compliance with environmental laws and regulations	<a href="#">Environmental management</a>	<a href="#">142</a>	
		<a href="#">Metric tables</a> : environmental footprint, environmental management	<a href="#">250</a>	
		<a href="#">Annual Report</a> , 10-K, pages 109-121		

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
GRI 308: Supplier environmental				
103-1 to 103-3	Management approach disclosures	<a href="#">Suppliers</a>	<a href="#">176</a>	
		<a href="#">Supplier Responsibility Code</a>		
308-1	New suppliers that were screened using environmental criteria	<a href="#">Suppliers</a> <a href="#">Supplier Responsibility Code</a>	<a href="#">176</a>	
308-2	Negative environmental impacts in the supply chain and actions taken	<a href="#">Suppliers</a>	<a href="#">176</a>	
		<a href="#">Supplier Responsibility Code</a>		
Topic specific standards, 400 social				
Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
GRI 401: Employment				
103-1 to 103-3	Management approach disclosures	<a href="#">Employee programs</a>	<a href="#">124</a>	
		<a href="#">Employee programs</a>	<a href="#">124</a>	
401-1	New employee hires and employee turnover	Confidentiality constraints, we can provide total turnover rate under 6 percent, but not able to provide breakdown by age group, gender, and region.		
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	<a href="#">Employee programs</a>	<a href="#">124</a>	
401-3	Parental leave	<a href="#">Employee programs</a>	<a href="#">124</a>	
GRI 402: Labor, management relations				
103-1 to 103-3	Management approach disclosures	<a href="#">Employee programs</a>	<a href="#">124</a>	
402-1	Minimum notice periods regarding operational changes	<a href="#">Employee programs</a>	<a href="#">124</a>	

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
GRI 403: Occupational health and safety				
103-1 to 103-3	Management approach disclosures	<a href="#">Health and safety</a>	<a href="#">136</a>	
403-1	Workers representation in formal joint management–worker health and safety committees	<a href="#">Health and safety</a>	<a href="#">136</a>	
403-2	Types of injury and rate of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Not applicable, disclosure does not cover the specific impacts that make the topic material. The <a href="#">3M Safety and Health Policy</a> applies to 3M operations everywhere, including new acquisitions. Hazards in 3M’s workplaces must be well understood and effectively managed to protect 3M employees, visitors, locations, and surrounding communities. In addition, in the spirit of continuous improvement, much is being done to evaluate opportunities to raise our safety standards. For these reasons we track and disclose global lost time incident rate, high hazards, recordable incident rate, recordable incident rates by category, and fatalities.		
403-3	Workers with high incidence or high risk of diseases related to their occupation	<a href="#">Health and safety</a>	<a href="#">136</a>	
403-4	Health and safety topics covered in formal agreements with trade unions	<a href="#">Health and safety</a>	<a href="#">136</a>	
GRI 404: Training and education				
103-1 to 103-3	Management approach disclosures	<a href="#">Employee programs</a>	<a href="#">124</a>	
404-1	Average hours of training per year per employee	<a href="#">Employee programs</a>	<a href="#">124</a>	
404-2	Programs for upgrading employee skills and transition assistance program	<a href="#">Employee programs</a>	<a href="#">124</a>	
404-3	Percentage of employees receiving regular performance and career development reviews	<a href="#">Employee programs</a>	<a href="#">124</a>	
GRI 405: Diversity and equal opportunity				
103-1 to 103-3	Management approach disclosures	<a href="#">Corporate governance</a> <a href="#">Employee diversity and inclusion</a> <a href="#">Employee programs</a>	<a href="#">88</a> <a href="#">72</a> <a href="#">124</a>	

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
405-1	Diversity of governance bodies and employees	<a href="#">Corporate governance</a> <a href="#">Corporate Officers</a> <a href="#">Board of Directors</a> <a href="#">Employee diversity and inclusion</a> <a href="#">Employee programs</a>	<a href="#">88</a>   <a href="#">72</a> <a href="#">124</a>	
GRI 406: Non-discrimination				
103-1 to 103-3	Management approach disclosures	<a href="#">Human rights</a> <a href="#">Respectful Workplace Principle</a>	<a href="#">110</a>	
GRI 407: Freedom of association and collective bargaining				
103-1 to 103-3	Management approach disclosures	<a href="#">3M Supplier Responsibility Code</a> <a href="#">Human rights</a> <a href="#">Suppliers</a>	<a href="#">110</a>  <a href="#">176</a>	
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<a href="#">3M Supplier Responsibility Code</a> <a href="#">Human rights</a> <a href="#">Suppliers</a> <a href="#">Supplier Responsibly Expectations</a>	<a href="#">110</a>  <a href="#">176</a>	
GRI 408: Child labor				
103-1 to 103-3	Management approach disclosures	<a href="#">3M Supplier Responsibility Code</a> <a href="#">Human rights</a> <a href="#">Suppliers</a> <a href="#">Supplier Responsibly Expectations</a>	<a href="#">110</a>  <a href="#">176</a>	
408-1	Operations and suppliers at significant risk for incident of child labor	<a href="#">Suppliers</a> <a href="#">3M Supplier Responsibility Code</a>	<a href="#">176</a>	
GRI 409: Forced or compulsory labor				
103-1 to 103-3	Management approach disclosures	<a href="#">3M Supplier Responsibility Code</a> <a href="#">Human rights</a> <a href="#">Suppliers</a>	<a href="#">110</a>  <a href="#">176</a>	

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	<a href="#">3M Supplier Responsibility Code</a>		
		<a href="#">Human rights</a>	<a href="#">110</a>	
		<a href="#">Suppliers</a>	<a href="#">176</a>	
		<a href="#">Supplier Responsibly Expectations</a>		
GRI 410: Security practices				
103-1 to 103-3	Management approach disclosures	<a href="#">Human rights</a>	<a href="#">110</a>	
410-1	Security personnel trained in human rights policies or procedures	<a href="#">Human rights</a>	<a href="#">110</a>	
GRI 411: Rights of indigenous peoples				
103-1 to 103-3	Management approach disclosures	<a href="#">3M Supplier Responsibility Code</a>		
		<a href="#">Human rights</a>	<a href="#">110</a>	
		<a href="#">Suppliers</a>	<a href="#">176</a>	
411-1	Incidents of violations involving rights of indigenous peoples	To the best of our knowledge, there were no incidents reported to Compliance and Business Conduct Department related to the rights of indigenous people in 2018.		
GRI 412: Human rights assessment				
103-1 to 103-3	Management approach disclosures	<a href="#">Human rights</a>	<a href="#">110</a>	
412-1	Operations that have been subject to human rights reviews or impact assessments	<a href="#">Human rights</a>	<a href="#">110</a>	
412-2	Employee training on human rights policies or procedures	<a href="#">Human rights</a>	<a href="#">110</a>	
GRI 413: Local communities				
103-1 to 103-3	Management approach disclosures	<a href="#">Communities</a>	<a href="#">64</a>	
		<a href="#">Human rights</a>	<a href="#">110</a>	
		<a href="#">Environmental management</a>	<a href="#">142</a>	
		<a href="#">Raw materials</a>	<a href="#">148</a>	
		<a href="#">Water</a>	<a href="#">154</a>	
		<a href="#">Climate and energy</a>	<a href="#">160</a>	
		<a href="#">Suppliers</a>	<a href="#">176</a>	

Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
413-1	Operations with local community engagement, impact assessments, and development programs	<a href="#">Communities</a>	<a href="#">64</a>	
		<a href="#">Raw materials</a>	<a href="#">148</a>	
		<a href="#">Water</a>	<a href="#">154</a>	
		<a href="#">Climate and energy</a>	<a href="#">160</a>	
		<a href="#">Suppliers</a>	<a href="#">176</a>	
413-2	Operations with significant actual and potential negative impacts on local communities	<a href="#">Code of Conduct</a>	<a href="#">100</a>	
		<a href="#">Enterprise risk</a>	<a href="#">96</a>	
		<a href="#">Human rights</a>	<a href="#">110</a>	
		<a href="#">Environmental management</a>	<a href="#">142</a>	
		<a href="#">Climate and energy</a>	<a href="#">160</a>	
		<a href="#">Water</a>	<a href="#">154</a>	
		<a href="#">Suppliers</a>	<a href="#">176</a>	
GRI 414: Supplier social assessment				
103-1 to 103-3	Management approach disclosures	<a href="#">Suppliers</a>	<a href="#">176</a>	
414-1	New suppliers that were screened using social criteria	<a href="#">Suppliers</a>	<a href="#">176</a>	
414-2	Negative social impacts in the supply chain and actions taken	<a href="#">Suppliers</a>	<a href="#">176</a>	
GRI 415: Public policy				
103-1 to 103-3	Management approach disclosures	<a href="#">Corporate governance</a>	<a href="#">88</a>	
		<a href="#">Lobbying and Political Activities</a>		
415-1	Political Contributions	<a href="#">Corporate governance</a>	<a href="#">88</a>	
		<a href="#">Lobbying and Political Activities</a>		
		<a href="#">Political Activities and Issue Advocacy</a>		
GRI 416: Customer health and safety				
103-1 to 103-3	Management approach disclosures	<a href="#">Our customers</a>	<a href="#">192</a>	
		<a href="#">Innovation management</a>	<a href="#">198</a>	
		<a href="#">Product Safety, Quality and Stewardship Principle</a>		



Disclosure number	Description	Cross-reference (hyperlinks) or direct answer	Page (.pdf)	Connections to United Nations Initiatives*
GRI 417: Marketing and labeling				
103-1 to 103-3	Management approach disclosures	<a href="#">Our customers</a>	<a href="#">192</a>	
		<a href="#">Innovation management</a>	<a href="#">198</a>	
		<a href="#">Product Safety, Quality and Stewardship Principle</a>		
GRI 418: Customer privacy				
103-1 to 103-3	Management approach disclosures	<a href="#">Data Privacy Principle</a>		
		<a href="#">3M Global Privacy Policy</a>		
GRI 419: Socioeconomic compliance				
103-1 to 103-3	Management approach disclosures	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>	
419-1	Non-compliance with laws and regulations in the social and economic area	Significant legal actions for non-compliance with laws and regulations in the social and economic area would be discussed in our <a href="#">Annual Report</a> , 10-K, pages 109-121		
* <a href="#">United Nations Global Compact Principles</a>		* <a href="#">United Nations Sustainable Development Goals</a>		

# SASB index

SASB index			
Dimension	General issue category	Cross-reference (hyperlinks) or direct answer	Page (.pdf)
Environment	GHG emissions	<a href="#">Climate and energy</a>	<a href="#">160</a>
		<a href="#">Metric table</a> , historical metrics; environmental performance, greenhouse gas and energy	<a href="#">250</a>
	Air quality	<a href="#">Climate and energy</a>	<a href="#">160</a>
		<a href="#">Metric table</a> , historical metrics; environmental performance, air quality	<a href="#">250</a>
	Energy management	<a href="#">Climate and energy</a>	<a href="#">160</a>
		<a href="#">Metric table</a> , historical metrics; environmental performance, greenhouse gas and energy	<a href="#">250</a>
	Water and wastewater management	<a href="#">Environmental management</a>	<a href="#">142</a>
		<a href="#">Water</a>	<a href="#">154</a>
		<a href="#">Metric table</a> , historical metrics; environmental performance, water	<a href="#">250</a>
	Waste and hazardous materials management	<a href="#">Environmental management</a>	<a href="#">142</a>
		<a href="#">Raw materials</a>	<a href="#">154</a>
		<a href="#">Metric table</a> , historical metrics; environmental performance, waste	<a href="#">250</a>
	Ecological impacts	<a href="#">Environmental management</a>	<a href="#">142</a>
		<a href="#">Raw materials</a>	<a href="#">148</a>
		<a href="#">Water</a>	<a href="#">154</a>
		<a href="#">Climate and energy</a>	<a href="#">160</a>
		<a href="#">Suppliers</a>	<a href="#">176</a>
		<a href="#">Metric table</a> , historical metrics; environmental performance	<a href="#">250</a>

Dimension	General issue category	Cross-reference (hyperlinks) or direct answer	Page (.pdf)
Social capital	Human rights and community relations	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>
		<a href="#">Suppliers</a>	<a href="#">176</a>
		<a href="#">Human rights</a>	<a href="#">110</a>
		<a href="#">Ethics and compliance</a>	
	Customer privacy	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>
		<a href="#">Enterprise risk</a>	<a href="#">96</a>
		<a href="#">3M Global Privacy Policy</a>	
		<a href="#">Annual Report</a> , 10-K, page 11	
	Data security	<a href="#">Enterprise risk</a>	<a href="#">96</a>
		<a href="#">Annual Report</a> , 10-K, page 11	
	Access and affordability	<a href="#">Our customers</a>	<a href="#">192</a>
	Product quality and safety	<a href="#">Our customers</a>	<a href="#">192</a>
		<a href="#">Innovation management</a>	<a href="#">198</a>
Human capital	Customer welfare	<a href="#">Our products</a>	<a href="#">210</a>
		<a href="#">Our customers</a>	<a href="#">192</a>
		<a href="#">Innovation management</a>	<a href="#">198</a>
		<a href="#">Product Safety, Quality and Stewardship Principle</a>	
	Selling products and product labeling	<a href="#">Our customers</a>	<a href="#">192</a>
		<a href="#">Innovation management</a>	<a href="#">198</a>
		<a href="#">Product Safety, Quality and Stewardship Principle</a>	
		<a href="#">Advertising and Product Representation Policy</a>	
	Labor practices	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>
		<a href="#">Human rights</a>	<a href="#">110</a>
		<a href="#">Suppliers</a>	<a href="#">176</a>
		<a href="#">Ethics and compliance</a>	
	Employee health and safety	<a href="#">Supplier Responsibility Code</a>	
		<a href="#">Health and safety</a>	<a href="#">136</a>
		<a href="#">Metric table</a> , historical metrics; health and safety	<a href="#">250</a>
	Employee engagement, diversity and inclusion	<a href="#">Communities</a>	<a href="#">64</a>
		<a href="#">Employee diversity and inclusion</a>	<a href="#">72</a>

Dimension	General issue category	Cross-reference (hyperlinks) or direct answer	Page (.pdf)
Business model and innovation	Product design and lifecycle management	<a href="#">Innovation management</a>	<a href="#">198</a>
	Business model resilience	<a href="#">Enterprise risk</a>	<a href="#">96</a>
		<a href="#">Our customers</a>	<a href="#">192</a>
		<a href="#">Innovation management</a>	<a href="#">198</a>
		<a href="#">Our products</a>	<a href="#">210</a>
		Supply chain management	<a href="#">Suppliers</a>
	Materials sourcing and efficiency	<a href="#">Supplier Responsibility Code</a>	
		<a href="#">Raw materials</a>	<a href="#">148</a>
		<a href="#">Suppliers</a>	<a href="#">176</a>
	Physical impacts of climate change	<a href="#">Annual Report</a> , 10-K, page 26	
<a href="#">Climate and energy</a>		<a href="#">160</a>	
	<a href="#">Annual Report</a> , 10-K, page 10		
Leadership and governance	Business ethics	<a href="#">Climate and energy</a>	<a href="#">160</a>
		<a href="#">Annual Report</a> , 10-K, page 10	
	Competitive behavior	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>
		<a href="#">Ethics and compliance</a>	
	Management of legal and regulatory environmental	<a href="#">Corporate Code of Conduct</a>	<a href="#">100</a>
		<a href="#">Antitrust and Competition Principle</a>	
	Critical incident risk management	<a href="#">Environmental management</a>	<a href="#">142</a>
		<a href="#">Annual Report</a> , 10-K, page 7, 12, 110-120	
		<a href="#">Global challenges</a>	<a href="#">52</a>
		<a href="#">Corporate governance</a>	<a href="#">88</a>
<a href="#">Enterprise risk</a>		<a href="#">96</a>	
<a href="#">Environmental management</a>		<a href="#">142</a>	
System risk management	<a href="#">Health and safety</a>	<a href="#">136</a>	
	<a href="#">Suppliers</a>	<a href="#">176</a>	
	<a href="#">Enterprise risk</a>	<a href="#">96</a>	
	<a href="#">Annual Report</a> , 10-K, page 10-12, 110-120		

For additional details on SASB integration for this report, see the [about report section](#)

# Assurance statement



## INDEPENDENT ASSURANCE STATEMENT

### Introduction and objectives of work

Bureau Veritas North America, Inc. (Bureau Veritas) was engaged by 3M Corporation (3M) to conduct an independent assurance of its 2019 3M Sustainability Report (the Report). This Assurance Statement applies to the related information included within the scope of work described below and within the boundaries specified in the Report. The intended users of the assurance statement are the stakeholders of 3M. The overall aim of this process is to provide assurance to 3M’s stakeholders on the accuracy, reliability and objectivity of the information included in the Report as described in the scope of work. The assurance process also evaluated 3M’s management of sustainability in accordance with the principles of inclusivity, materiality and responsiveness.

The information that was assured and its presentation in the Report are the sole responsibility of the management of 3M. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

### Scope of work

3M requested Bureau Veritas to include in its independent assurance the following:

- Data included in the Report for the calendar year 2018 reporting period as shown in the attached Summary of Assured Information;
- Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyze and review the data subject to the assurance process; and
- Evaluation of the Report in accordance with the Assurance Standard AA1000AS (2008)<sup>1</sup> Type 2 assurance.

Excluded from the scope of our work is any assurance of information relating to:

- Text or other written statements associated with the Report;
- Activities outside the defined assurance period; and
- Financial data and data reported that are not included in the Summary of Assured Information.

### Methodology

Bureau Veritas undertook the following activities during the assurance process:

1. Interviews with relevant personnel of 3M (including managers and staff members at the corporate and site level);
2. Review of internal and external documentary evidence produced by 3M;
3. Audit of performance data presented in the Report including a detailed review of a sample of data;
4. Visits to manufacturing sites located in Cordova, IL; Cynthiana, KY; and Knoxville, IA;
5. Remote data reviews for manufacturing sites located in Brockville, ON, Canada; Shanghai, China; and Wroclaw, Poland;
6. Visit to 3M headquarters office located in Maplewood, Minnesota; and

<sup>1</sup> Published by AccountAbility: The Institute of Social and Ethical Accountability



7. Review of 3M data and information systems for collection, aggregation, analysis and internal verification and review.

The work was planned and carried out to provide a moderate level of assurance and we believe it provides a sound basis for our conclusions.

Our findings

On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the reviewed information within the scope of our verification is not materially correct.
- Nothing has come to our attention to indicate that the reviewed information is not a fair representation of the actual environmental and health and safety data for calendar year 2018.
- It is our opinion that 3M has established appropriate systems for the collection, aggregation and analysis of quantitative data, including energy use, direct and indirect greenhouse gas (GHG) emissions, water consumption, waste quantities and disposition, injury and illness rate, lost day rate, severity rate and number of environmental violations.

A summary of data within the scope of assurance for 2018 is attached.

Adherence to the AA1000 Accountability Principles

Based on the work undertaken during this assurance process, we are of the opinion that 3M adheres to the Accountability Principles of inclusivity, materiality and responsiveness as discussed below.

Inclusivity

Based on discussions with 3M, their processes appear to be inclusive of stakeholders. In 2018, 3M commissioned a third party provider to update their materiality assessment and used that assessment to identify and engage stakeholders. Some of the stakeholder groups that 3M has identified to include in their sustainability processes include 3M employees, customers, non-governmental organizations, investors and the public.

Materiality

3M updated their materiality assessment in 2018. During the materiality assessment stakeholders indicated that 3M should take a leadership role. The Chief Technology Officer and Chief Sustainability Officer report annually to the Board's Nominating and Governance Committee on their sustainability efforts. In addition, their Corporate EHS and Business Conduct Committee ensures that sustainability principles are embedded throughout the company. Background information can be found in the 3M proxy statement:

<https://investors.3m.com/financials/sec-filings/sec-filings-details/default.aspx?FilingId=13322342>

Responsiveness

3M receives questions regarding sustainability from customers, investors, non-governmental organizations and others through various channels. The company has guidance for responding to customer inquiries on sustainability issues and uses this guidance for responding to other groups as well. Responses to surveys are coordinated by the corporate sustainability group. Each business group also has sustainability leads who assist with responding to stakeholders. In addition, through the materiality assessment, 3M is building out a strategy for future sustainability efforts.

Key Observations for 2018

- Data systems at 3M allow for consolidation and review of environmental, safety, and energy data at the corporate level for reporting. Internal auditing assists with ensuring accurate data collection.

- Plants in water stressed areas have developed water plans and 3M is working to continue to improve the plans through standardization and working with regional groups.
- With corporate staff support, plants are developing project plans that have quantified expected results to meet overall reduction goals with respect to waste and water. This provides additional support to the planning for achieving goals.
- 3M continued to work within their supply chain, specifically with paper providers, to engage higher Tier suppliers to ensure sustainable practices are being followed.
- Control of emissions of high global warming potential compounds from manufacturing processes is continuing to evolve to reduce process-related GHG emissions.
- Community giving is aligned with core organizational values to improve lives with a focus on education, community and the environment, specifically supporting underserved and under resourced populations. 3M provides community support through various engagements in the community. Corporately, the 3M Foundation provides funding to targeted non-profit organizations in the U.S. and within their global footprint. 3M also makes in-kind donations.

Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 180 years history in providing independent assurance services, and an annual 2018 revenue of 4.8 Billion Euros.

No member of the assurance team has a business relationship with 3M, its Directors or Managers beyond that of verification and assurance of sustainability data and reporting. We have conducted this verification independently and we believe there to have been no conflict of interest. Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of Bureau Veritas standard methodology for the Assurance of Sustainability Reports.

Attestation:



John A. Rohde Lead Verifier  
Senior Project Manager  
Sustainability and Climate Change Services



Trevor Donaghu, Technical Reviewer  
Program Manager  
Climate Change Services




Bureau Veritas North America, Inc.

Denver, Colorado

April 10, 2019



Summary of Assured Information Reporting Year 2018 3M Company											
											
Demographic Metrics	Units	Value	Waste Metrics	Units	Value	Energy Metrics	Units	Value	Air Emissions Metrics	Units	Value
Total Global Full-time Equivalent (Headcount)	Total Number	93,500	Zero Landfill	% of Total Manufacturing Sites	30.4%	Total Energy Use (Absolute)	MMBTUs	29,900,000	Absolute Scope 1 Emissions (Direct)	Metric Tons CO2e	4,790,000
Total Global Employees at Year-End (Headcount)	Total Number	94,300	Waste Disposed: Landfill, Treatment and Incineration (Absolute)	Metric Tons	151,000	Total Energy Use (Absolute)	MWh	8,750,000	Absolute Scope 2 Location-based Emissions (Indirect)	Metric Tons CO2e	1,860,000
Total Number Part-Time Employees	Total Number	2,100	Waste by Disposal Type, Incineration	Metric Tons	43,600	Total Fuel Oil #1, #2, #6	MMBTUs	1,110,000	Absolute Scope 2 Market-based Emissions (Indirect)	Metric Tons CO2e	1,480,000
Total Number Full-Time Employees	Total Number	92,200	Waste by Disposal Type, Landfilled	Metric Tons	108,000	Total Jet Fuel	MMBTUs	104,000	Absolute Scope 1 and Scope 2 Market-based Emissions (Indirect)	Metric Tons CO2e	6,270,000
Percentage of Female Employees to Total Employees	%	35.4	Total Hazardous Waste (Absolute)	Metric Tons	43,400	Total Propane	MMBTUs	194,000	Total Scope 3 GHG Emissions (Upstream)	Metric Tons CO2e	9,630,000
Percentage of Female Employees in Management Positions	%	30.3	Total Nonhazardous Waste (Absolute)	Metric Tons	187,000	Total Gasoline and Diesel	MMBTUs	182,000	Category 1 - Purchased Goods and Services	Metric Tons CO2e	6,840,000
Environmental Management System Metrics	Units	Value	Total Waste Diverted (Absolute)	Metric Tons	312,000	Total Coal	MMBTUs	0	Category 2 - Capital Goods	Metric Tons CO2e	369,000
Total Number of Significant Spills (Spills reported in 10K reporting)	Total Number	0	Waste-to-Energy	Metric Tons	79,100	Total Natural Gas	MMBTUs	16,200,000	Category 3 - Fuel and Energy Related Activities	Metric Tons CO2e	596,000
Number of Significant Fines (Fine or penalty >\$10,000)	Total Number	0	Onsite Recycle & Reuse	Metric Tons	63,300	Total Electricity Consumption	MMBTUs	10,800,000	Category 4 - Upstream Transportation and Distribution	Metric Tons CO2e	1,170,000
Total Monetary Value of Significant Fines	Million \$USD	0	Offsite Reuse	Metric Tons	32,900	Total Steam Consumption	MMBTUs	1,260,000	Category 5 - Waste Generated in Operations	Metric Tons CO2e	271,000
Environmental Liability Accrued at Year End	Million \$USD	0	Offsite Recycle	Metric Tons	137,000	Renewable Energy	% Total Electricity Use	26.8	Category 6 - Business Travel	Metric Tons CO2e	61,600
Health and Safety Metrics	Units	Value	Water Metrics	Units	Value	Other Metrics	Units	Value	Category 7 - Employee Commuting	Metric Tons CO2e	327,000
Global Lost Time Incident Rate	Per 100 3M employees (200,000 work hours)	0.29	Total Water Use (Absolute)	Million Cubic Meters	45.8	Customer GHG Avoidance through 3M Product Use	Million Metric Tons CO2e	14.9	Category 13 - Downstream Leased Assets	Metric Tons CO2e	<1000
Global Recordable Incident Rate	Per 100 3M employees (200,000 work hours)	1.1	Sites located in Water Stress/Scarce Areas; water sources significantly affected by withdrawal of water with water	Total Number	25	Total Training Instances 2017 and 2018)		139,000	Total Volatile Organic Compound Emissions (Absolute)	Metric Tons	4,420
Work Related Fatalities - 3M Employees	Total Number	0	Supplier Responsibility Metrics	Units	Value						
Work Related Fatalities - 3M Contractors	Total Number	1	Total Number of Suppliers	Total Number	78,700						
Work Related Fatalities - Total Number	Total Number	1	Total Number of Supplier Reviews	Cumulative Number since 2008	6,350						

# Metric tables

## Five-year metric table

Social performance employees

Financial performance

Community engagement

Environmental performance

- Environmental management system metrics
- Greenhouse gas metrics
- Air emissions metrics
- Energy metrics
- Waste metrics
- Water metrics

Health and safety metrics

Supplier responsibility metrics

## Historical metric table

Environmental Footprint

Health and Safety

## Social performance, employees

Metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Global full-time equivalent employees	Total number	89,800	89,400	91,600	91,500	93,500	2.19	4.12
Global employee (headcount)	Total number	90,700	90,400	92,500	92,400	94,300	2.06	3.97
Total number part-time employees	Total number	2,560	2,520	2,390	2,330	2,100	-9.87	-18.0
Total number full-time employees	Total number	88,200	87,900	90,100	90,000	92,200	2.44	4.54
Percentage of female employees to total employees	%	33.9	33.9	34.8	34.7	35.4	2.02	4.42
Percentage of female employees in management positions	%	26.1	26.9	27.8	29.1	30.3	4.12	16.1

## Financial performance

Metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Net sales	Million \$USD	31,800	30,300	30,100	31,700	32,800	3.47	3.14
Operating income¹	Million \$USD		6,980	7,030	7,690	7,210	-6.24	
Research, development and related expenses¹	Million \$USD		1,760	1,760	1,870	1,820	-2.67	
Total operating expenses¹	Million \$USD		23,300	23,100	24,000	25,600	6.67	
Net income attributable to 3M	Million \$USD	4,960	4,830	5,050	4,860	5,350	10.1	7.86
Per share-basic	Actual \$USD	7.63	7.72	8.35	8.13	9.09	11.8	19.1



Financial performance <small>cont.</small>								
Metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Per share-diluted	Actual \$USD	7.49	7.58	8.16	7.93	8.89	12.1	18.7
Capital expenditures	Million \$USD	1,490	1,460	1,420	1,370	1,580	15.3	6.04
Payments to providers of capital	Million \$USD	2,390	2,700	2,870	3,020	3,520	16.6	47.3
Provision for income taxes	Million \$USD	2,030	1,980	2,000	2,680	1,640	-38.8	-19.2
'Amounts for operating income; research, development, and related expenses; and total operating expenses were reclassified back to 2015 to reflect the adoption of an accounting standard (ASU No. 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost) effective January 1, 2018 on a retrospective basis. Amounts prior to 2015 have not been reclassified.								

Community engagement								
Metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Total global giving	Million \$USD	81.3	72.8	67.3	73.5	66.3	-9.80	-18.5
Total cash donations	Million \$USD	30.3	34.1	34.8	35.9	35.6	-0.836	17.5
Total in-kind donations	Million \$USD	51.0	38.4	32.5	37.6	30.7	-18.4	-39.8

Environmental performance								
Environmental management system - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Total number of significant spills	Total number	0	0	0	0	0		
		Significant spill: Spills included in the organization’s financial statement						
Number of significant fines	Total number	1	0	0	2	0		
		Significant fine: Fine or penalty over \$10,000						
Total monetary value of significant fines	Million \$USD	0.113	0	0	0.0900	0.000		
Environmental liability accrued at year end	Million \$USD	0	0	0	0	0	For more information, see our Annual Report, 10k, pages 109-121.	
Greenhouse gas - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Absolute Scope 1 emissions (direct)	Metric tons CO <sub>2</sub> e	4,390,000	3,770,000	4,140,000	3,960,000	4,790,000	21.0	9.11
Absolute Scope 2 location-based emissions (indirect)	Metric tons CO <sub>2</sub> e	2,240,000	1,860,000	1,840,000	1,880,000	1,860,000	-1.06	-17.0
Absolute Scope 2 market-based emissions (indirect)	Metric tons CO <sub>2</sub> e			1,780,000	1,650,000	1,480,000	-10.3	
Total Scope 1 and 2 GHG emissions: market-based accounting	Metric tons CO <sub>2</sub> e			5,920,000	5,610,000	6,270,000	11.8	
Total GHG emissions (indexed to net sales, location-based)	Metric tons per net sales (MM \$USD)	208	186	199	184	203	10.3	-2.40
Customer GHG reduction through use of various 3M product platforms	Million metric tons CO <sub>2</sub> e			13.4	13.0	14.9	14.6	
Net GHG emissions based on the categories evaluated. Due to change in boundaries, Scope 3 upstream emissions should not be compared on a year-on-year basis. Baseline reporting year has not been established for our Scope 3 emissions. Additional changes occurred to calculation methods for Scope 1 and 2 limiting comparison between reporting year 2018 and other inventory years; see about report section for additional information.								

Environmental performance <small>cont.</small>								
Greenhouse gas - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Total Scope 3 emissions (upstream)	Metric tons CO <sub>2</sub> e	9,200,000	8,670,000	9,540,000	9,400,000	9,630,000		
Total Scope 3 emissions (downstream)	Metric tons CO <sub>2</sub> e	All downstream categories either do not apply or are de minimis.						
Scope 3, Category 1 (purchased goods and services)	Metric tons CO <sub>2</sub> e	6,830,000	6,200,000	7,120,000	6,570,000	6,840,000	Methodology updated to calculate values based on 3M spend using U.S. EPA EEIO factors.	
Scope 3, Category 2 (capital goods)	Metric tons CO <sub>2</sub> e	499,000	452,000	423,000	436,000	369,000		
Scope 3, Category 3 (fuel and energy related activities; not including Scope 1 or Scope 2 emissions)	Metric tons CO <sub>2</sub> e	551,000	621,000	607,000	631,000	596,000	Calculated from 3M primary data on energy consumption.	
Scope 3, Category 4 (upstream transportation and distribution)	Metric tons CO <sub>2</sub> e	995,000	780,000	699,000	1,050,000	1,170,000	Emissions disclosed in 2014 were miscategorized as Category 9; data does not include emissions from transportation of raw materials from suppliers.	
Scope 3, Category 5 (waste generated in operations)	Metric tons CO <sub>2</sub> e	Insufficient data	287,000	299,000	323,000	271,000	Calculated from 3M primary data on waste by facility size or number of employees. Methodology for determining facility type changed resulting in change to past years' results, see about report section for more details.	
Scope 3, Category 6 (business travel)	Metric tons CO <sub>2</sub> e	Insufficient data	Insufficient data	59,300	60,700	61,600	Calculated from 3M primary data on business travel. Calculations have changed, see about report section for details.	
Scope 3, Category 7 (employee commuting)	Metric tons CO <sub>2</sub> e	326,000	325,000	332,000	332,000	327,000	Methodology updated to calculate values based on 3M employee headcount with U.S. EPA GHG emission factors. All historical values recalculated.	

Environmental performance <small>cont.</small>								
Greenhouse gas - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Scope 3, Category 8 (upstream, leased assets)	Metric tons CO <sub>2</sub> e	Included in Scope 1 or Scope 2 emissions reporting.					These emissions are included in Scope 1 and 2, because they are all under 3M operational control.	
Scope 3, Category 9 (downstream transportation and distribution)	Metric tons CO <sub>2</sub> e	Not evaluated; most of 3M's products are intermediates with many potential end uses. According to the GHG Protocol Scope 3 Calculation and Guidance, a company that produces intermediate products with many potential downstream applications, each with a potentially different GHG emission profile, cannot reasonably estimate the downstream emissions associated with the various end uses of the intermediate products.						
Scope 3, Category 10 (processing of sold products)	Metric tons CO <sub>2</sub> e							
Scope 3, Category 11 (use of sold products)	Metric tons CO <sub>2</sub> e							
Scope 3, Category 12 (end of life treatment of sold products)	Metric tons CO <sub>2</sub> e							
Scope 3, Category 13 (downstream leased assets)	Metric tons CO <sub>2</sub> e	Included in Scope 1 or Scope 2 emissions reporting.	<1,000	<1,000	<1,000	<1,000	Prior to 2015, 3M reported facilities leased to third parties under Scope 1 and 2.	
Scope 3, Category 14 (franchises)	Metric tons CO <sub>2</sub> e	0	0	0	0	0	No franchises under this scope of boundary.	
Scope 3, Category 15 (investments)	Metric tons CO <sub>2</sub> e	0	0	0	0	0	No investments under this scope of boundary.	
Biogenic CO <sub>2</sub> emissions	Metric tons CO <sub>2</sub> e					3,080		
The data reported is in accordance to the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Corporate Value Chain (Scope 3) Accounting and Reporting Standard.								
Estimated Scope 3 data uncertainty is ±50% (WRI/WBCSD, GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, 2011).								
Scope of boundary for the GHG metric is determined using the control approach to GHG emissions accounting as defined in the GHG Protocol Corporate Reporting and Accounting Standard. Additional information can be found in the about report section.								
Air emissions - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Total volatile organic compound emissions (absolute)	Metric tons	5,550	4,840	4,690	4,620	4,420	-4.33	-20.4
Total volatile organic compounds emissions (indexed to net sales)	Metric tons per net sales (MM \$USD)	0.174	0.160	0.156	0.146	0.135	-7.53	-22.6

Environmental performance <small>cont.</small>								
Energy - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Total energy use (absolute)	MMBtu	29,100,000	28,400,000	29,000,000	29,600,000	29,900,000	1.01	2.75
Total energy use (absolute)	MWh	8,850,000	8,320,000	8,490,000	8,670,000	8,750,000		
Total energy (indexed to net sales)	MMBTUs per net sales (MM \$USD)	913	937	962	935	911	-2.57	-0.219
Renewable energy	% of total electricity use		0.50	7.60	17.9	26.8	49.7	
Total fuel oil #1, #2, #6	MMBtu	1,630,000	1,330,000	1,200,000	1,130,000	1,110,000	-1.77	-31.9
Total jet fuel	MMBtu	161,000	153,000	159,000	138,000	104,000	-24.6	-35.4
Total propane	MMBtu	192,000	170,000	190,000	177,000	194,000	9.60	1.04
Total gasoline and diesel	MMBtu	209,000	270,000	155,000	155,000	182,000	17.4	-12.9
Total coal	MMBtu	0	0	0	0	0		
Total natural gas	MMBTUs	15,900,000	14,700,000	15,400,000	15,700,000	16,200,000	3.18	1.89
Total electricity consumption	MMBtu	11,100,000	10,600,000	10,700,000	11,100,000	10,800,000	-2.70	-2.70
Total steam consumption	MMBtu	1,010,000	1,130,000	1,180,000	1,220,000	1,260,000	3.28	24.8
Total heating consumption	MMBtu	19,100,000	17,700,000	18,300,000	18,500,000	19,000,000	2.70	-0.524
Total heating consumption	MWh	5,590,000	5,190,000	5,360,000	5,430,000	5,570,000		
Scope of boundary for the energy metric includes 3M locations larger than 30,000 square feet. Additional scope information can be found in the about report section.								

Environmental performance <small>cont.</small>								
Waste - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Zero landfill	% of total manufacturing sites		28.2	26.6	27.9	30.4	8.96	
Waste disposed: landfill, treatment and incineration (absolute)	Metric tons	153,000	158,000	161,000	160,000	151,000	-5.63	-1.31
Waste disposed: landfill, treatment and incineration (indexed to net sales)	Metric tons per net sales (MM \$USD)	4.80	5.23	5.33	5.07	4.62	-8.88	-3.75
Waste by disposal type, incineration	Metric tons	44,200	45,200	44,100	45,200	43,600	-3.54	-1.36
Waste by disposal type, landfilled	Metric tons	109,000	112,000	116,000	115,000	108,000	-6.09	-0.917
% data coverage total waste (absolute), normalized to sales value of production (SVOP)	%	98	97	98	98	99	1.02	1.02
Starting in 2016, waste disposed and waste by disposal type does not include waste-to-energy. Total hazardous and total nonhazardous waste below includes waste-to-energy.								
Total hazardous waste (absolute)	Metric tons	41,100	45,600	43,600	43,900	43,400	-1.14	5.60
Total nonhazardous waste (absolute)	Metric tons	164,000	172,000	180,000	188,000	187,000	-0.532	14.0
Total waste diverted (absolute)	Metric tons	287,000	297,000	284,000	307,000	312,000	1.63	8.71
Waste-to-energy	Metric tons	51,900	60,100	63,100	71,600	79,100	10.5	52.4
Onsite recycle and reuse	Metric tons	69,500	65,500	56,700	60,400	63,300	4.80	-8.92
Offsite reuse	Metric tons	31,900	31,300	27,600	31,500	32,900	4.44	3.13
Offsite recycle	Metric tons	134,000	139,000	137,000	143,000	137,000	-4.20	2.24
Deep well injection	Per 3M's Waste Management Program Standard, deep well injection is not acceptable waste management practice for use by any 3M location.							
Scope of boundary for the waste metric includes 3M manufacturing locations with total output over 4.54 metric tons per year (10,000 pounds). Additional scope information can be found in the about report section.								



Environmental performance <small>cont.</small>								
Water - metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Total water use (absolute)	Million cubic meters	42.5	42.2	44.8	46.0	45.8	-0.435	7.76
Total water use (indexed to net sales)	Million cubic meters per net sales (MM \$USD)	0.00134	0.00139	0.00149	0.00145	0.00140	-3.45	4.48
Scope of boundary for the water metric includes 3M manufacturing locations with total output over 4.54 metric tons per year (10,000 pounds). Additional information can be found in the about report section.								
Sites located in water stress/scarce areas; water sources significantly affected by withdrawal of water with water conservation planning efforts	Total number	27	25	25	25	25	0.00	-7.41
Scope of boundary for water stressed/scarce areas includes 3M locations with annual water use equal to or greater than 1,000 cubic meters were in water-stressed areas defined by the extremely high baseline water stress value according to the World Business Council for Sustainable Development (WBCSD) Global Water Tool™. 3M uses this tool to screen site locations for water stress/scarce levels and prioritizes conservation plan development based on internal criteria.								

Health and safety								
Metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Global lost time incident rate	Per 100 3M employees (200,000 work hours)	0.355	0.321	0.304	0.341	0.292	-14.4	-17.7
Global recordable incident rate	Per 100 3M employees (200,000 work hours)	1.45	1.22	1.20	1.16	1.10	-5.17	-24.1
Work related fatalities - 3M employees	Total number	0	0	1	0	0		
Work related fatalities - 3M contractors	Total number	0	0	0	1	1		
Work related fatalities - total number	Total number	0	0	1	1	1		

Supplier responsibility								
Metric	Metric units	RY-2014	RY-2015	RY-2016	RY-2017	RY-2018	2017-2018 annual change, %	2014-2018 five-year change, %
Total number of suppliers	Total number	95,800	98,500	88,200	85,100	78,700	-7.52	-17.8
Total number of supplier reviews	Cumulative number (since 2008)	3,880	4,570	5,120	5,790	6,350	9.67	63.7

3M historical metrics							
Metric	Metric units	RY-2002	RY-2005	RY-2010	RY-2015	RY-2018	Historical reporting change, %
Net sales	Million \$USD	16,300	26,700	29,600	30,300	32,800	101
Environmental footprint							
Absolute Scope 1 emissions (direct)	Metric Tons CO <sub>2</sub> e	16,800,000	10,100,000	4,280,000	3,770,000	4,790,000	-71.5
Absolute Scope 2 location-based emissions (indirect)	Metric Tons CO <sub>2</sub> e	1,540,000	1,700,000	1,940,000	1,860,000	1,860,000	20.8
Total Scope 1 and Scope 2 greenhouse gas emissions (indexed to net sales, location-based)	Metric Tons per Net Sales (MM \$USD)	1,120	559	233	186	203	-81.9
2012-2016 U.S. EPA GHG-MRR/IPCC AR5 based inventory accounting is not directly comparable to 2002-2011 WRI/IPCC TAR, AR4 based GHG accounting. 2002 inventory recalculated according to U.S. EPA GHG-MRR/IPCC AR5 methodology (2.7% increase in absolute emissions over original reported value).							
Total volatile organic compound emissions (absolute)	Metric tons		6,800	6,070	4,800	4,420	-35.0
Total volatile organic compounds emissions (indexed to net sales)	Metric tons per net sales (MM \$USD)		0.321	0.228	0.158	0.135	-57.9
Total energy use (absolute)	MMBtu		27,900,000	26,800,000	28,400,000	29,900,000	7.17
Total energy use (absolute)	MWh		8,170,000	7,860,000	8,320,000	8,750,000	
Total energy (indexed to net sales)	MMBtu per net sales (MM \$USD)		1,320	1,010	937	911	-31.0
Waste disposed: landfill, treatment and incineration (absolute)	Metric tons		145,000	136,000	158,000	151,000	4.14
Waste disposed: landfill, treatment and incineration (indexed to net sales)	Metric tons per net sales (MM \$USD)		6.83	5.09	5.21	4.62	-32.4
Starting in 2016, waste disposed and waste by disposal type does not include waste-to-energy. Total hazardous and total nonhazardous waste below includes waste-to-energy.							

3M historical metrics <small>cont.</small>							
Metric	Metric units	RY-2002	RY-2005	RY-2010	RY-2015	RY-2018	Historical reporting change, %
Environmental footprint <small>cont.</small>							
Total hazardous waste (absolute)	Metric tons		47,700	42,300	45,600	43,400	-9.01
Total nonhazardous waste (absolute)	Metric tons		132,000	134,000	172,000	187,000	41.7
Total water use (absolute)	Million cubic meters		49.0	43.0	42.2	45.8	-6.53
Total water use (indexed to net sales)	Million cubic meters per net sales (MM \$USD)		0.00231	0.00161	0.00139	0.00140	-39.4
Health and safety							
Global lost time incident rate	Per 100 3M employees (200,000 work hours)		0.594	0.364	0.321	0.292	-50.8
Global recordable incident rate	Per 100 3M employees (200,000 work hours)		1.85	1.56	1.22	1.10	-40.4

