

# Improving every life

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

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## Our world faces unprecedented and accelerating challenges

As the world's population marches towards 9 billion people, with the greatest growth concentrated in emerging economies, the global community must seek solutions to limited natural resources, lack of access to education and healthcare, inadequate food supplies, rapid urbanization, stressed water systems, and a global climate crisis. It is clear that these global dynamics are challenging the sustainable growth of future generations.

## Imagine a world where every life is improved

At 3M, we look at Sustainability in terms of shared global needs. The challenges we must solve for a sustainable future don't always follow clear rules or methods — but we see them clearly. And we understand the impact we make in improving our business, our planet, and every life can be far greater if done in collaboration with our customers, communities, governments, and partners.

Improving lives  
through innovation  
and action

On the cover: In 2019, 3M Industrial Mineral Products Division California site installed solar cells containing 3M™ EPE Film.

Photo: 3M™ Diamond Grade™ Flexible Prismatic Reflective Markings Series 973 making school transportation safer by enhancing school bus visibility, especially during early morning and evening hours.

# A framework for the greater good

At 3M what we believe is simple: We are people committed to helping other people. We seek to observe, understand, and solve. Every day we help tackle problems, big and small, in pursuit of our vision to improve every life.

Our customers, employees, investors, and other stakeholders are asking for bigger commitments and stronger actions. We have set clear goals and ambitious, long-term strategies to direct our efforts to areas in which we can make a significant impact. Building on our global capabilities and diverse technologies, we established our Strategic Sustainability Framework to focus on three priority areas:



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



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



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

These priority areas 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

Worldwide, 73% of beach litter is plastic: bottles, bottle caps, food wrappers, grocery bags, and polystyrene containers; and by 2050, virtually every seabird species on the planet will be eating plastic.<sup>(1)</sup>

The current global economy's linear business model of "take, make, and waste" is depleting natural resources faster than they can be replenished and straining ecosystems. Imagine re-purposing a piece of plastic at the end of its use, giving it another life as something else. Its use would become circular, and the end of use wouldn't mean the end of life.

A circular economy does more with less, keeps products and materials in use, designs out waste and pollution, and regenerates natural systems. At the core is an opportunity to develop technologies and business models that are restorative and regenerative by design. At 3M, we see the circular economy as an opportunity to inspire leadership, innovation, and disruptive change, all driving impact for a sustainable future.



### Our commitment:

Every product that enters 3M's new product commercialization process must have a **Sustainability Value Commitment**, demonstrating how it drives impact for the greater good. This formal requirement embeds Sustainability into the pipeline that produces 3M's diverse global products.

<sup>(1)</sup> National Geographic [www.nationalgeographic.com/environment/plastic-facts/](http://www.nationalgeographic.com/environment/plastic-facts/)

3M™ Thinsulate™ 100% Recycled Featherless Insulation is made with 100% post-consumer recycled content and is certified by independent agencies including OEKO-TEX®, Global Recycled Standard (GRS), and bluesign®. The product also offers a more sustainable, cruelty-free alternative to natural down. 3M™ Thinsulate™ 100% Recycled Featherless Insulation is featured in products made by Minneapolis-based outerwear brand Askov Finlayson. Known for its celebration of winter and the hashtag #KeepTheNorthCold, Askov Finlayson introduced what they are calling "the world's first climate positive winter parka."

Scotch-Brite™ Clean & Shine Floor Pads are effective with just water, meaning less chemicals for a stunning reflection with less time, effort, and equipment. Certified by Green Seal® for significantly improved initial performance compared to competitive products, extending the useful life of the floor pad and reducing solid waste generation.

## Designing with circularity in mind

Post-it Flex® Write Surface quickly transforms any work surface into a whiteboard. In doing so, the product reduces landfill waste from old chalkboards and other surfaces. Its adhesive is at least 60% plant-based material. Lightweight rolls reduce the transportation footprint, and the liner, core, and box are recyclable. Permanent marker can be erased with water, no chemicals needed.



3M™ Envision™ Print Wrap Films and Overlaminates offer dimensional stability and versatility in applications, whether on vehicles or interior, exterior wall applications. These non-PVC films are made in part from bio-based material, manufactured with less solvent, and GREENGUARD™ Gold certified for low chemical emissions, contributing to healthier indoor air quality.



3M™ Natural Pozzolans, a SCM (supplementary cementitious material) used in the making of concrete, helps reduce CO<sub>2</sub> emissions as a partial replacement of cement in concrete.<sup>2</sup> It's estimated that each ton of SCM used to displace cement reduces CO<sub>2</sub> emissions by 0.75 tons.<sup>3</sup>

Sometimes a new design or a whole new way of packaging products is the best way to reduce impact. 3M™ Tegaderm™ Dressings are packed using an innovative nested design that reduces material by 30% compared to rectangular packaging. The carton is also made of 100% recycled materials.



<sup>(2)</sup> CO<sub>2</sub> emissions from cement's calcining step  
<sup>(3)</sup> Based on 3M screening-level life cycle estimates

# Science for Climate

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

Even though we have seen global emissions decrease temporarily as a result of the unprecedented global COVID-19 pandemic, climate change remains an existential threat. Its impacts are widespread and its risks are not limited by continent, industry or even species. Warmer temperatures are lengthening the season and geographic range of many diseases.<sup>(1)</sup> Extreme weather events are growing in frequency, rendering significant economic impacts. Ecosystems face collapse and biodiversity is threatened as nearly one million species are currently facing extinction.<sup>(2)</sup>

At 3M we support the global consensus set forth in the 2015 Paris Agreement and we are incorporating the 2018 findings of the Special Report on Global Warming of 1.5°C by the Intergovernmental Panel on Climate Change into our goals, operations, and actions. The global climate crisis impacts business, our communities, and our families. We believe that by working together we can drive the systemic change needed. We recognize the work to be done and are inspired by the opportunity to chart our collective path forward.



### Our commitment:

3M's global headquarters is powered by renewable electricity — an important step in our commitment to move our entire global operations to **100% renewable** sources of power, and innovating for a carbon-free future.

<sup>(1)</sup> United Nations Framework Convention on Climate Change [unfccc.int/news/climate-change-impacts-human-health](http://unfccc.int/news/climate-change-impacts-human-health)  
<sup>(2)</sup> The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) [www.ipbes.net/](http://www.ipbes.net/)



3M™ Dual Brightness Enhancement Film is a family of reflective polarizers used to recycle light and bring a brighter view to all viewers in front of a device, and can increase the energy efficiency in a device, whether it's plugged in or running on battery power.

## Designing solutions for adaptation and mitigation

Indoor and outdoor air quality, climate change, and human health are all connected; a changing climate will make indoor air pollutants more widespread and severe. **Filtrete™ Room Air Purifiers** can help capture 99.97% of airborne particles<sup>3</sup> such as dust and lint, mold spores, bacteria, and pet dander with a Filtrete™ True HEPA filter. Even better, Filtrete™ Room Air Purifier models with ENERGY STAR® certification are 40% more energy-efficient than standard models.



3M™ Molecular Detection is a rapid molecular method with the ability to test for multiple types of pathogens simultaneously. When used with the 3M™ Molecular Detection Assay 2 – *Salmonella*, the system can fight food-borne illness and is the primary Salmonella testing method of the USDA Food Safety Inspection Service. The 3M™ Molecular Detection System reduces energy and water use, waste, and greenhouse gas emissions relative to traditional Salmonella culture methods.

3M™ Wind Blade Protection Tape can help protect the leading edge of wind turbine blades against weathering and harsh environments, ultimately enhancing reliability, extending life, and improving the performance of wind turbines.



Imagine the lightest of particles helping to reduce the weight of the airplanes we travel in and the cars we drive, giving us better overall fuel economy or battery range. **3M™ Glass Bubbles** — hollow glass microspheres — help shed pounds per vehicle. That means filling up at the pump less often or holding a charge longer. Across an entire fleet, manufacturers can more easily meet weight reduction targets and emissions standards.

3M™ VHB™ Tapes can help product light-weighting, reduce energy consumption, and enhance aesthetics. These high-strength acrylic foam tapes create a long-lasting bond that builds strength over time while eliminating rivets, screws, bolts, and welds.

<sup>(3)</sup> From the air passing through the filter media. Initial efficiency value

# Science for Community

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

By 2050, the world population is expected to surpass 9 billion people. Science is more important than ever to help our growing population live well. We need scientific solutions to global challenges like climate change, accessible health care, interconnectivity, and safe workplaces — and technical skills are increasingly required for all types of jobs.

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

At 3M we recognize the importance of science and use it every day to improve the lives of people in communities around the world through our products and our action. We know that in order to solve global challenges we need new technologies, creative scientists, and evidence-based policies and decisions to drive impactful change. We also recognize the importance of well-trained science, technology, engineering, and math (STEM) graduates and the critical need for a diverse workforce with advanced manufacturing and vocational skills. We believe in the power of science, lending our expertise, and investing in the bright minds of tomorrow — together we will lead and design a sustainable future for all.

## Our commitment:

In 2019, the company expanded its skills-based service program, 3M Impact, to provide 300,000 workhours of **skills-based volunteerism** by 3M employees to improve lives and help solve society's toughest challenges by 2025.

Photo: 3Mers utilized their expertise in project management to assist Chintan, an organization in Delhi, India that works to assure responsible consumption while supporting marginalized communities. As a result, Chintan is able to document, replicate and more effectively share organizational success.

Helping to improve patient outcomes and using passion for patient-centered science to create differentiated, efficacious solutions, the 3M Medical Solutions Division and Health Care Business Group collaborate with many organizations. One such event included sponsorship of the kickoff event on **Antimicrobial Resistance** held during the UN General Assembly in September 2019.



## Empowering community vibrancy around the world

3M is collaborating with the international non-governmental organization **Clean Air Asia** on science-based air quality solutions for New Delhi, India, and Metro Manila, Philippines, aiming to create healthier, more livable cities. According to the World Health Organization (WHO), air pollution causes seven million premature deaths each year. The health impact of poor air quality is particularly notable in the South-East Asia Region, where people in 99% of cities are exposed to pollution levels that exceed WHO guidelines.<sup>1</sup>



With leading-edge technology, product innovations, and groundbreaking research, **personal protective equipment (PPE)** by 3M is engineered so everyone can perform their best when conditions such as environmental hazards, natural disasters, infectious diseases, and workplace activities impact personal safety.

3M™ M\*Modal CDI Engage™ One™ reduces the administrative burden on physicians and empowers the entire care team to drive better clinical outcomes by enabling the creation of a more complete, compliant, and accurate physician note.



3M<sup>SM</sup> Health Care Academy and Personal Safety Division educate on proper use of health and safety products for infection prevention, personal safety, and overall health through our commitment to provide training to five million people globally on worker and patient safety.<sup>2</sup>

3M Impact, a skills-based service program, allows employees to lend their business skills, experience, and energy to make a difference in communities around the world, while developing their own leadership, problem-solving, and interpersonal skills to benefit their home communities and entire careers.



<sup>(1)</sup> World Health Organization. Air Pollution Overview. Retrieved from [https://www.who.int/health-topics/air-pollution#tab=tab\\_1](https://www.who.int/health-topics/air-pollution#tab=tab_1)

<sup>(2)</sup> Includes the number of training experiences delivered by our Health Care Group and Personal Safety Division

# Our actions

More than four decades ago, 3M launched the groundbreaking Pollution Prevention Pays (3P) program. We have been setting global environmental goals since 1990, and in 2019 we completed the fourth year of an ambitious 10-year goal cycle. Our Sustainability goals reflect a heightened commitment to thinking holistically about how our operations and products can drive change for a sustainable future.

## Science for Circular

**Achieved 100% Sustainability Value Commitment** for new products  
achieving goal of 100% ●●●

**Reduced manufacturing waste by 12.6% indexed**  
exceeding goal of 10% reduction ●●●

**35.4%** (69 manufacturing facilities) zero landfill  
exceeding goal of 30% ●●●

**Increased water efficiency 5.76% indexed**  
toward goal of 10% improvement ●●○

**100%** (18 facilities) located in water stress/scarc areas engaged  
maintaining goal of engaging 100% ●●●

**550 completed supplier assessments**  
maintaining goal ●●●

## Science for Climate

**Improved energy efficiency by 3.20% indexed**  
behind goal of 30% improvement ●○○

**Increased renewable energy 32.6%** total electricity use  
toward goal of 50% increase ●●○

**Nearly 60 million metric tons CO<sub>2</sub> equivalent customer avoided emissions**  
toward goal of 250 million metric tons ●●○

**Scope 1 and 2 emissions 68.1% below baseline**  
ahead of goal of 50% below baseline<sup>1</sup> ●●●

## Science for Community

**Provided 1.24 million training instances eLearning platform**  
toward goal of 5M training instances ●●○

**\$73.3M investments in total global giving**  
achieving goal of continuing to invest in global giving programs ●●●

**Continued participation in employee development programs**  
toward goal of 100% participation ●●○

**Increased pipeline of diverse talent in management from 32.6% to 41.8%**  
toward goal of doubling the pipeline ●●○

**Donated 20,600 skills-based work hours globally**  
toward goal of 300,000 hours ●●○

Numbers reflect progress through 2019.  
<sup>1</sup> 2002 baseline all year; all others have a 2015 baseline.  
●○○ behind goal ●●○ toward goal ●●● achieving goal

# More than a century of innovation for the greater good...



Photo: 3M™ Thinsulate™ 100% Recycled Featherless Insulation

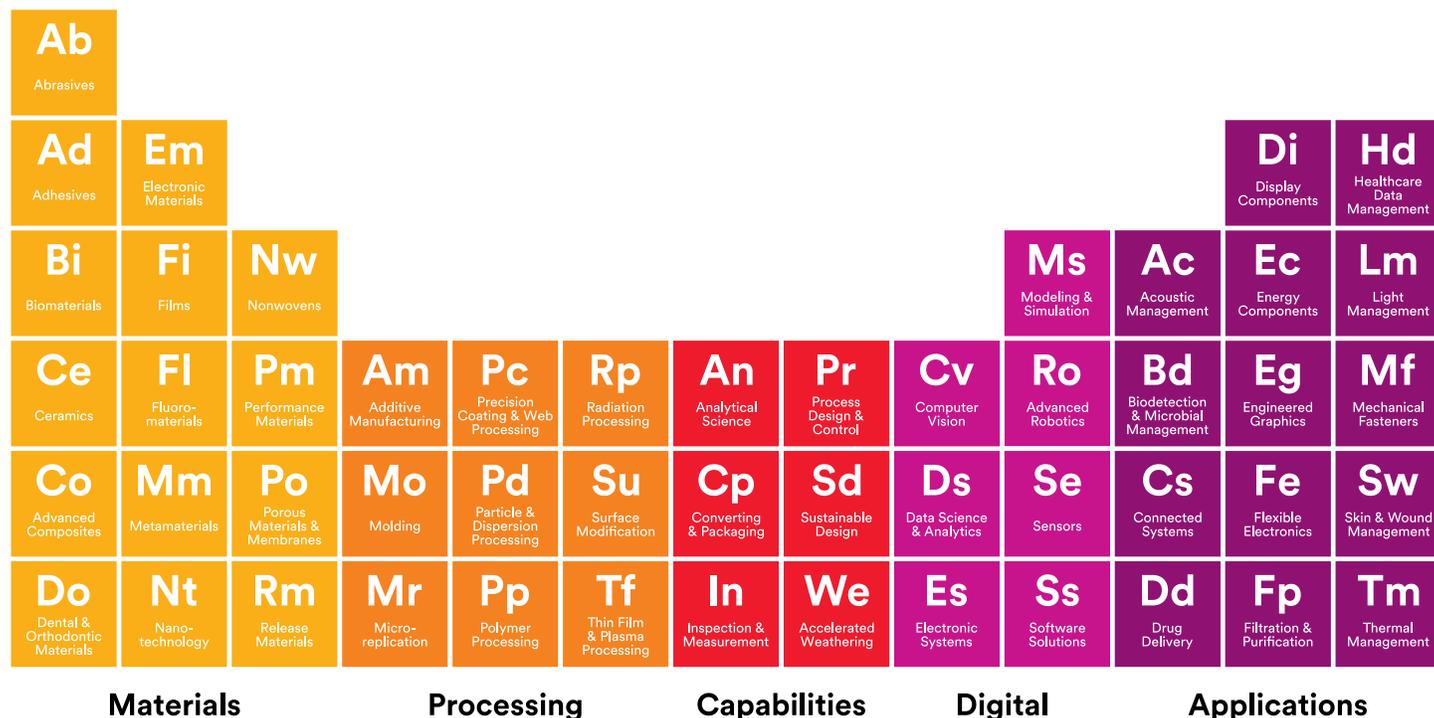
# Join us

as we use science to advance every company,  
enhance every home, and improve every life.

Working in a collaborative culture, our people apply their talent to combine our technologies across businesses, creating unique solutions for our customers and society, all in support of the greater good.

Our technology platforms range from adhesives and abrasives, to microreplication and nonwovens, to computer vision and data science and analytics.

## 3M Technology Platforms



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