DOWFRIENDS Newsletter

DowFriends News

As we enter 2023, we remain focused on managing the dynamic macroenvironment and continue to position the company for long-term competitiveness. View the stories below to see how Dow continues to align its actions to optimize our ambition further, including our plan to achieve $1 billion in cost savings in 2023.

Dow's Seek Together Podcast Series, Episode 6: Water & Waste

In this episode, Wendy Takeguchi (Alliance to End Plastic Waste), Zach Green (President at BeAlive Studios) and John Holm, Vice President Strategic Initiatives at PYXERA Global, discuss the challenges and positive actions that contribute to cleaner rivers around the globe to help people understand their impact on river systems and inspire them to take action.

Listen Now!

Dow declares quarterly dividend of 70 cents per share

Dow has declared a dividend of 70 cents per share, payable March 10, 2023, to shareholders of record on February 28, 2023.

This marks the 446th consecutive dividend paid by the Company or its affiliates since 1912.

Dow outlines targeted actions to deliver $1B in cost savings in 2023

Company continues its Decarbonize and Grow strategy as well as its disciplined and balanced approach to capital allocation

Dow outlined a series of targeted actions aligned to its previously stated plan to achieve $1 billion in cost savings in 2023. The proactive actions will further optimize the Company's cost structure in response to near-term macroeconomic uncertainty, while maintaining its long-term competitiveness across the economic cycle.

Specifically, Dow expects to realize $1 billion in cost savings in 2023 through:

Structural improvements of $500 million, maintaining a low cost-to-serve operating model:

- Optimizing labor and services costs, including a global workforce reduction of approximately 2,000 roles;
- Shutting down select assets, while further evaluating Dow's global asset base, particularly in Europe, to ensure long-term competitiveness and enhance cost efficiency; and
- Increasing productivity via end-to-end process improvements.

Operating expense reductions of $500 million, focused on near-term cash flow:

- Decreasing turnaround spending, with a continued focus on maintaining safety and reliability;
- Reducing purchased raw materials, logistics and utilities costs; and
- Aligning spending levels to the macroeconomic environment.

"We are taking these actions to further optimize our cost structure and prioritize business operations toward our most competitive, cost-advantaged and growth-oriented markets, while also navigating macro uncertainties and challenging energy markets, particularly in Europe," said Jim Fitterling, Dow chairman and CEO. "We remain committed to capitalizing on our long-term growth opportunities in a disciplined and balanced manner, and these actions further position us to advance our Decarbonize and Grow strategy and strengthen our competitive position."

The Company will record a charge of $550 million to $725 million in the first quarter of 2023 for costs associated with these activities, which primarily include severance and related benefit costs; costs associated with exit and disposal activities; and asset write-downs and write-offs.

Longer-term, Dow remains on track to grow its underlying EBITDA by greater than $3 billion by 2030 while reducing its carbon emissions by 30 percent versus its 2005 baseline as it progresses on its path to carbon neutrality by 2050.

As Dow implements the actions announced, the Company will engage local stakeholders in each region and in compliance with local regulations and consultation processes.

Energizing the future of STEM

"I'm excited to see what the future holds for these students. I know they will be essential for a more sustainable, inclusive and innovative future for our world," said Paul Kline, Senior Global IT Director

As a parent to three children in their 20s, I've tried to guide them towards activities they are passionate about so they can better understand themselves, know how they find joy and choose rewarding careers.

I am forever grateful that my children found FIRST® (For Inspiration and Recognition of Science and Technology), an inclusive robotics community that inspires young people. The team-based robotics programs for ages 4-18 (PreK-12) are supported by a global system of volunteers, educators and sponsors like Dow. Teams operate to conduct research, fundraise, design, build and showcase their achievements during annual challenges that rival the excitement of any sporting event I've attended.

As a parent, team mentor and the Dow Executive Sponsor for our Global Citizenship partnership with FIRST, I've witnessed firsthand this project-based approach to learning. There is no doubt kids are having fun while learning essential STEM skills through FIRST, but what's more important is that they're learning how to learn – a crucial mindset, considering many careers they will pursue don't exist yet.

However, what's even more compelling is the global community that FIRST has created.

#MoreThanRobots

The FIRST community embodies inclusion, diversity, equity and belonging. As a Senior Global IT Director, I am accustomed to guiding teams to innovative solutions. When working together to solve problems, the best teams embrace diverse experiences. This builds self-confidence and a sense of inclusion and belonging, which are essential to success within Dow and FIRST.

As a Company that values Inclusion, Diversity and Equity (ID&E), we are proud to make that an essential aspect of our partnership with FIRST. ID&E is embedded in our international grants and composes an important piece of the total grant Dow offers to FIRST teams in our communities. We also incentivize our teams to reflect on how they can be more diverse and engage in their community - **55%** of our supported teams this season are helping make their programs more diverse and inclusive.

For example, one of our Dow-supported teams, the Space Cookies from California, focuses on menstrual equity. The team engaged more than **80** teams as ambassadors to provide free menstrual products at more than **100** competitions. By ensuring coverage at events worldwide, the team is moving toward its goal of ensuring no one in the FIRST community faces anxiety, exclusion, or stigma because they are menstruating.

#OMGrobots!

The robots are the vehicle this community uses to instill the philosophies of Gracious Professionalism® and Coopertition® and the results are OUTSTANDING! FIRST's longitudinal study* shows that FIRST is impacting the development of tomorrow's innovators. FIRST students and alumni have the following outcomes:

90%
in communication skills

93%
in conflict resolution

94%
in problem-solving skills

81% of FIRST alumni declare majors in STEM by their fourth year in college compared to 68% of their peers

FIRST female alumni are **four times** more likely to take engineering courses when compared to their peers

And one of the most impactful aspects of our partnership is that most Dow-supported teams include an employee volunteer who mentors the team and provides valuable hours of support to help students succeed.

Through Dow's support, we have:

- **341** Dow employees volunteering with FIRST

- Reached approximately **2,300** students directly through Team Grants

- Supported students in **18** countries through team and international grants

#SustainableFuture

Each year, FIRST chooses a new theme for the annual challenges. This year's theme, FIRST ENERGIZE℠, is about reimagining the future of sustainable energy and power. I couldn't think of a better group to tackle this challenge. I'm excited to see what the future holds for these students. I know they will be essential for a more sustainable, inclusive and innovative future for our world.

Dow and Jaguar TCS Racing bring the power of MobilityScience™ to Season 9 of ABB FIA Formula E World Championship

In their third season as Jaguar TCS Racing's Official Materials Science Partner, Dow is working with team engineers to identify the materials that will help the new Jaguar I-TYPE 6 racecar perform at its optimum level – and shape the future of electric vehicles.

Dow and partner Jaguar TCS Racing are gearing up for an exciting weekend at the upcoming Mexico City E-Prix to kick-off Season 9 of the ABB FIA Formula E World Championship.

Dow has been the Official Materials Science Partner to the team since 2021, with initial collaborations beginning in 2020, helping Jaguar TCS Racing push the boundaries of electric vehicle (EV) innovation through collaboration. The 2023 season is pushing the pedal down on that innovation with the introduction of the Gen3 racecar, which will make its Formula E race debut in Mexico City this coming weekend.

"With every new generation of the Formula E racecar, the sport is engineering beyond the boundaries of what we consider possible for electric vehicles, especially in terms of power," said Tim Boven, Commercial Vice President, Dow MobilityScience™. "The same goes for our materials. Our MobilityScience™ team is committed to engineering solutions that drive low carbon mobility, and the Jaguar I-TYPE 6 racecar provides the perfect testbed to develop innovative solutions."

Dow's partnership with Jaguar TCS Racing provides a high-throughput laboratory to continually test and perfect the mobility solutions that will help unlock new levels of sustainability and performance for automotive customers around the world.

This weekend, Dow will welcome key stakeholders to the storied Autodromo Hermanos Rodriguez track, as well as parallel events, to catalyze conversations on the future of low carbon mobility – a topic the Latin American region is intently focused on. From 2021 to 2022, electric vehicle sales in

Mexico increased by about 204%, and there is still huge growth potential, as Mexico globally ranks seventh overall in vehicle manufacturers and fifth in auto parts manufacturers.

“Dow is in pursuit of being the most innovative, inclusive, sustainable, and customer-centric materials science company in the world, and collaborations with like-minded partners are crucial to that effort,” said Verónica Pérez, Dow North Region of Latin America President. “Our partnership with Jaguar TCS Racing is helping us not only to further our commitment to sustainability but also to advance conversations around EV innovation in Latin America and share the power and possibilities of MobilityScience™ solutions.”

Dow builds on 100+ years of transportation experience and expertise in application development to deliver innovative, cutting-edge solutions that keep the world moving. Its MobilityScience™ team provides OEMs and Tiers with a seamless and collaborative global partner for materials innovation through access to world-class technical capabilities and a broad portfolio of materials science solutions for the industry. Dow is committed to the future of mobility and is addressing the most pressing mobility challenges like de-carbonization and improving EV performance. For more information visit www.DowMobilityScience.com.

LVMH and Dow intend to collaborate to improve sustainable packaging across major perfume and cosmetics brands

Dow and LVMH Beauty, a division of LVMH, the world leader in luxury and home to 75 iconic brands, will collaborate to accelerate the use of sustainable packaging across LVMH’s perfume and cosmetic products. This collaboration would enable both bio-based and circular plastics to be integrated into several of the beauty multinational’s product applications without compromising functionality or quality of the packaging.

Bio-based and circular plastics, which are made from bio-based and plastic waste feedstock respectively, will be used to produce sustainable SURLYN™ Ionomers, polymers used to manufacture premium perfume caps and cosmetic cream jars. Within 2023, some of LVMH’s perfume packaging will include both bio-based SURLYN™ and circular SURLYN™. The sustainable SURLYN™ portfolio will deliver similar crystalline transparency and freedom of design expected from the rest of Dow’s SURLYN™ range, at a low carbon footprint.

“At LVMH, with our Life 360 program, we made the decision that our packaging will contain zero plastic from virgin fossil resources in a near future. Collaborating with Dow in developing sustainable SURLYN™ is key as this material is used in some of our iconic perfumes, starting with GUERLAIN La Petite Robe Noire. It is helping LVMH achieve our sustainability targets without any compromise on quality”, said Claude Martinez, Executive President and Managing Director of LVMH Beauty.

“Creating a circular economy takes every player in the value chain to commit to ambitious goals and challenge the status quo. Dow looks forward to supporting the sustainability journey of a leading global luxury brand,” said Karen S. Carter, President of Packaging & Specialty Plastics, Dow.

Bio-based feedstocks for the production of bio-based SURLYN™ include raw materials such as used cooking oil. As only waste residues or by-products from an alternative production process will be utilized, these raw feedstock materials will not consume extra land resources nor compete with the food chain.

Hard-to-recycle mixed plastic waste are transformed into circular SURLYN™ through advanced recycling technologies. The technologies break down waste plastics into their basic chemical elements using heat and pressure, creating raw material that is equivalent to those made from virgin fossil feedstock. This raw material, or circular feedstock, can be used in a wide range of packaging, giving waste that is currently going to landfill or being incinerated a second life.

Dow is collaborating with customers and other stakeholders to drive the transformation that is needed to tackle the challenges of climate change and the environment. This collaboration represents another key example of Dow's continued effort to transform waste and alternative feedstock as per its Transform the Waste target announced in October 2022.

For more information on our work within the beauty industry, please visit: dow.inc/PCD

Dow earns spot in S&P Global Sustainability Yearbook

Dow's 2022 Corporate Sustainability Assessment scores drive meaningful improvements across several respected sustainability indices

Dow announced that it has achieved listing in the S&P Global Sustainability Yearbook, reflecting scoring placing Dow among top industry performers.

To be listed in the S&P Global Sustainability Yearbook, companies must score within the top 15% of their industry and must achieve an S&P Global Corporate Sustainability Assessment (CSA) Score within 30% of their industry's top-performing company.

The CSA also serves as the basis for the scores that power the Dow Jones Sustainability Index (DJSI) and its list of global sustainability leaders. The DJSI World Index represents the top 10% of the largest 2,500 companies in the S&P Global Broad Market Index (BMI) based on long-term economic, environmental and social criteria.

"We are committed to continuing to improve all aspects of sustainability as a driver of long-term value creation for Dow and for all our stakeholders," said Jim Fitterling, Dow chairman and CEO. "These accomplishments reflect incredibly important work on behalf of customers, consumers and communities in particular. The performance bar continues to rise and we intend to rise up alongside it."

This listing comes on the heels of two additional sustainability honors: Dow's 22nd inclusion on the Dow Jones Sustainability World Index and recent CDP scoring elevating Dow to A-minus (A-) across all three categories of Climate, Water and Forest.

To earn an A – or Leadership – score from CDP, organizations must show environmental leadership, disclosing on climate change, deforestation or water security. They must demonstrate best practice in strategy and action as recognized by frameworks such as the TCFD, Accountability Framework and others. As well as having high scores in all other levels these companies will have undertaken actions such as creating a climate transition plan, developing water-related risk assessment strategies, or reporting on deforestation impact for all relevant operations, supply chains and commodities.

Dow Recognized among Top 100 Global Innovators™ for 12th consecutive year

Clarivate recognizes world's most innovative organizations setting the benchmark for global innovation

Dow has been named as a Top 100 Global Innovators™ for the 12th consecutive year by Clarivate™, a global leader in connecting people and organizations to intelligence they can trust to transform their world.

Through this list, Clarivate identifies organizations at the pinnacle of the global innovation landscape by measuring excellence focused on exceptional consistency and scale in innovativeness. Dow has been recognized every year under the Chemicals and Materials category since Clarivate began presenting the award in 2011.

Dow's scientists and engineers use cutting-edge technology to develop sustainable, market-driven scientific and technical innovations to deliver solutions to some of the world's toughest challenges. Innovation at Dow helps solve challenges related to affordable and efficient supply of food, suitable housing and high-performing buildings, improved personal health and comfort, and advancements in emerging technologies such as electric vehicles and smart devices. Dow's collaboration with customers and investment in high-throughput research capabilities has continued to improve R&D productivity and has accelerated product, process, and application development.

"Dow being listed for the 12th consecutive year signifies the consistent talent and strength of our organization," said A.N. Sreeram, senior vice president, Research & Development, and chief technology officer for Dow, "The capabilities and expertise of Dow's R&D organization provide a distinct competitive advantage, enabling the company to efficiently develop innovative products that are simultaneously better performing and more sustainable."

Gordon Samson, Chief Product Officer, Clarivate, said, "At Clarivate, we aim to bring clarity to the complex. Our focus is to pore over what humanity knows today and to put forward the insight that explores all possible horizons; that enables transition and transformation. We acknowledge the Top 100 Global Innovators 2023 – companies and organizations that know that innovative ideas and solutions to current challenges not only bring rewards to their businesses but foster genuine improvements in society."

Learn more about Top 100 Global Innovators 2023 and who features on this year's list here.

A TikTok Tale: Chemical Kim and Dow

As the world races to develop and scale solutions for myriad global sustainability challenges, a diversity of perspectives will be key. That's one reason why, in 2015, the United Nations dubbed February 11 the "International Day of Women and Girls in Science." Women make up less than 30% of the world's researchers today. STEM fields must do more to welcome and encourage women-identifying students and workers — because lived experiences often yield the most targeted solutions.

Kim Hilton is one key voice working to close the gap. When she turns on her camera, she brings the magic of science to viewers around the world — including women and girls who are interested in pursuing careers in science. Known as Chemical Kim on her social media channels, the chemistry professor and influencer has more than 1.4 million TikTok followers and a talent for unpacking complex topics with hands-on education — like in this TikTok video on advanced recycling.

Jill Martin, Dow's Global Sustainability Fellow, shares Kim's passion for the advancement of women-identifying students and employees and appreciates her work to expand sustainability education in accessible ways.

"Circularity and sustainable plastics can be a complex space. Kim's content shows how new technologies and innovators are addressing plastic waste and creating more sustainable and circular products," Jill explained.

In celebration of this year's 8th annual International Day of Women and Girls in Science, Jill recently spoke with Chemical Kim about her passion for supporting women-identifying, science-interested people in STEM.

Jill: How did you go from chemist to TikTok influencer?

Kim: My passion is making science education inclusive and accessible for everyone. For more than 25 years, I've shared science demonstrations and activities with kids at local schools, community groups, libraries, museums and even a local children's hospital.

Fifteen years ago, I developed the "Chemical Kim Science Show" on local public access television, which led to a biweekly segment on a morning show. I turned to TikTok during the pandemic to keep bringing science lessons to kids and encouraging discovery and investigation in their own environments.

Jill: What advice do you have for your TikTok audience, especially those who identify as women or girls?

Kim: It's important to find a role model. Women are a minority in science, and many scientists you learn about in school or online won't be women. Reach out to other women in science that you admire and feel a connection to. Having women in science is a necessity as diverse minds and diverse thinking are important in the advancement of research and development.

For my TikTok audience at large considering careers in science, look to your curiosities. Most people in STEM, including myself, sought science as a career because we've been curious from a young age. It's important to recognize that studying science won't provide answers to your curious questions — but it will provide you with the tools to seek the answers.

The other very important piece of advice is to embrace this passion to learn science. The courses are challenging and require a lot of time and hard work, but the commitment will be worth gaining the knowledge and understanding of the world around you along with having a career you will enjoy and that you worked so hard to achieve.

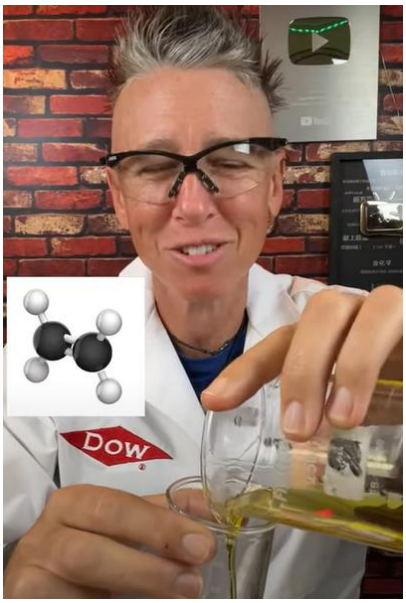
Jill: What has your personal experience been like as a female influencer in the STEM place? Any examples?

Kim: I've had parents, kids and young adults tell me how much I am a role model. One of my favorite exchanges involved a mom and her 10-year-old daughter approaching me at a large amusement park. The daughter was extremely excited to meet me and shared that she watches all my videos and loves performing my science activities.

A few weeks later, I received an email from this same mom, sharing a picture of her daughter dressed up as Marie Curie for Halloween. The mom explained that after discovering Chemical Kim, her daughter has become obsessed with learning science.

I also receive comments and messages from young women in high school or college sharing that they are going into science because I've shown how fun learning science can be.

Jill: How do you see sustainability playing a role in STEM and in engaging women and girls in science?



Kim: I predict today's role of sustainability in STEM and engaging women and girls in science will be like the role environmental studies has had since the early 1990s, when I was an undergraduate attending Michigan Technological University, a science and engineering-focused college.

At that time, degrees in environmental science or environmental engineering were scarce and mostly a focus of study in biochemistry or civil engineering degrees. But over the past 30 years, some of the greatest increases in undergraduate and graduate STEM degrees have been in environmental science and engineering.

The impact at Michigan Tech alone brought the construction of the Dow Environmental Science and Engineering Building. And although engineering is a historically male-dominated space, environmental engineering is seeing this gender imbalance flipped at some colleges across the country with women equal to or greater than men in enrollment. Now, sustainability is at the forefront of environmental science and engineering degrees, research and careers. I am excited about the future progress of environmental science with diverse voices and ideas involved, particularly those from women and minority groups who have been previously left out of the conversation.

Jill: Why and when did you start talking about plastics on your TikTok channel?

Kim: My first viral plastic video, posted in 2021, featured a simple how-to on making samples of starch-based plastics — and it got more than 2 million views! The idea for this video came from my followers' interest in bio-based plastics made from renewable biomass sources, like vegetable fats and oils, corn starch, straw, woodchips, sawdust and recycled food waste. Since many of my viewers don't have a strong background in science, I jumped at the opportunity to connect chemistry to their everyday lives through that first video.

Jill: Who has been most responsive to your videos about plastic?

Kim: I was pleasantly surprised to discover that my videos about plastic are popular outside of the U.S., especially in places like the Philippines and Indonesia. In both countries, viewers have shared comments about how they reduce plastic waste in their everyday lives. In contrast, people post comments that are skeptical about recycling and sustainable plastics, which creates an opportunity for healthy dialogue. My goal is to highlight how science is key to tackling issues like climate change and the immense potential it has to make an impact.

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