



DOWFRIENDS Newsletter

Partnering with communities on Martin Luther King Jr. Day

“Life’s most persistent and urgent question is, ‘What are you doing for others?’”

- Dr. Martin Luther King, Jr.



As Martin Luther King Day approached, I grounded myself in his words – words that resonate as powerfully today as they did in his time, “Life’s most persistent and urgent question is, “What are you doing for others?””

- Alveda Williams, Ph.D., chief inclusion officer

[Learn More](#)

Inaction or In Action?

SOAR, the inclusion summit held at the Great Lakes Bay Invitational LPGA tournament, began with a question. For the attendees – our customers, suppliers and community members – this question was personal, a daily challenge: inaction or in action?

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Dow reports fourth quarter 2023 results

FINANCIAL HIGHLIGHTS

- GAAP loss per share was \$0.15; operating earnings per share (EPS)¹ was \$0.43, compared to \$0.46 in the year-ago period and \$0.48 in the prior quarter. Operating EPS excludes significant items in the quarter, totaling \$0.58 per share, primarily from a one-time non-cash settlement charge aligned to our pension de-risking plans.
- Net sales were \$10.6 billion, down 10% versus the year-ago period, reflecting declines in all operating segments due to slower global macroeconomic activity. Sales were down 1% sequentially, as price and volume gains in Packaging & Specialty Plastics were more than offset by seasonal demand declines in Performance Materials & Coatings.
- Volume increased 2% versus the year-ago period, with gains across all regions except Asia Pacific, which was flat. Sequentially, volume decreased by 1%, including the impact to our Bahía Blanca, Argentina site due to a severe, unexpected storm in December.
- Local price decreased 13% year-over-year, with declines in all operating segments, due to lower feedstock and energy costs. Sequentially, local price was flat, reflecting modest gains in most regions.
- Currency increased 1% year-over-year and was flat sequentially.
- Equity losses were \$7 million, compared to equity losses of \$43 million in the year-ago period, primarily due to improved equity earnings at the Kuwait joint ventures. Sequentially, equity losses were flat.
- GAAP net loss was \$95 million. Operating EBIT¹ was \$559 million, down \$42 million year-over-year, primarily driven by lower prices. Sequentially, Op. EBIT was down \$67 million, as gains in Packaging & Specialty Plastics were more than offset by seasonally lower volumes in Performance Materials & Coatings.
- Cash provided by operating activities – continuing operations was \$1.6 billion, down \$450 million year-over-year and down \$30 million compared to the prior quarter. Free cash flow¹ was \$870 million.
- Returns to shareholders totaled \$616 million in the quarter, including \$491 million in dividends and \$125 million in share repurchases.
- The Company delivered 2023 full year net sales of \$44.6 billion compared to \$56.9 billion in 2022. GAAP net income was \$660 million, down from \$4.6 billion in 2022. Operating EBIT was \$2.8 billion, down from \$6.6 billion last year. Cash provided by operating activities – continuing operations was \$5.2 billion compared to \$7.5 billion in 2022. The Company delivered returns to shareholders of \$2.6 billion through \$2 billion in dividends and \$625 million in share repurchases in 2023.

SUMMARY FINANCIAL RESULTS

<i>In millions, except per share amounts</i>	Three Months Ended Dec 31			Three Months Ended Sept 30	
	<u>4Q23</u>	<u>4Q22</u>	<u>vs. SPLY</u> <u>[B / (W)]</u>	<u>3Q23</u>	<u>vs. PQ</u> <u>[B / (W)]</u>
Net Sales	\$10,621	\$11,859	\$(1,238)	\$10,730	\$(109)
GAAP Income (Loss), Net of Tax	\$(95)	\$647	\$(742)	\$327	\$(422)
Operating EBIT¹	\$559	\$601	\$(42)	\$626	\$(67)
Operating EBIT Margin¹	5.3%	5.1%	20 bps	5.8%	(50) bps
Operating EBITDA¹	\$1,216	\$1,255	\$(39)	\$1,283	(\$67)
GAAP Earnings (loss) Per Share	\$(0.15)	\$0.85	\$(1.00)	\$0.42	\$(0.57)
Operating Earnings Per Share¹	\$0.43	\$0.46	\$(0.03)	\$0.48	\$(0.05)
Cash Provided by Operating Activities – Cont. Ops	\$1,628	\$2,078	\$(450)	\$1,658	\$(30)

CEO QUOTE

Jim Fitterling, chair and chief executive officer, commented on the quarter:

“In the fourth quarter, Team Dow continued to advance our strategic, financial and operational priorities in a challenging and dynamic macroeconomic environment. We saw year-over-year volume improvements in the quarter, delivered our goal of \$1 billion in targeted cost actions for the year, and took actions to further de-risk our pension plans. With our continued focus on cash generation, we achieved a cash flow to EBITDA conversion of 96% in 2023, which enabled free cash flow of \$870 million and returns to shareholders of \$616 million in the quarter. We also hit a key milestone towards advancing our long-term Decarbonize & Grow strategy with the final investment decision for our Path2Zero project in Fort Saskatchewan, Alberta, where construction will begin this year. The strength of our balance sheet allows us to navigate the bottom of the cycle and have the strength to invest and capitalize on the next upside in the global economy.”

SEGMENT HIGHLIGHTS

Packaging & Specialty Plastics

<i>In millions, except margin percentages</i>	Three Months Ended Dec 31			Three Months Ended Sept 30	
	<u>4Q23</u>	<u>4Q22</u>	<u>vs. SPLY</u> <u>[B / (W)]</u>	<u>3Q23</u>	<u>vs. PQ</u> <u>[B / (W)]</u>
Net Sales	\$5,641	\$6,073	\$(432)	\$5,454	\$187
Operating EBIT	\$664	\$655	\$9	\$476	\$188
Operating EBIT Margin	11.8%	10.8%	100 bps	8.7%	310 bps
Equity Earnings	\$40	\$56	\$(16)	\$50	\$(10)

Packaging & Specialty Plastics segment net sales in the quarter were \$5.6 billion, down 7% versus the year-ago period. Local price decreased 11% year-over-year, driven by lower prices globally. Currency increased net sales by 1%. Volume increased 3% year-over-year, led by higher packaging demand, primarily in the U.S. & Canada and Latin America. On a sequential basis, net sales increased by 3% led by higher merchant sales of hydrocarbons, as well as higher polyethylene prices in all regions.

Equity earnings were \$40 million, down \$16 million compared to the year-ago period and down \$10 million on a sequential basis, primarily due to planned maintenance turnaround activity at the Thai joint ventures.

Operating EBIT was \$664 million, an increase of \$9 million compared to the year-ago period. Sequentially, Op. EBIT increased by \$188 million, driven by higher integrated polyethylene margins, the impact of planned maintenance turnaround activity in the third quarter, and higher licensing revenue.

Packaging and Specialty Plastics business reported a net sales decline versus the year-ago period, as higher demand for industrial and consumer packaging in all regions was more than offset by lower polyethylene prices. Sequentially, net sales increased slightly due to higher polyethylene prices and licensing revenue, which were partially offset by reduced polyethylene supply availability.

Hydrocarbons & Energy business reported a net sales decline compared to the year-ago period, primarily driven by lower third-party power and steam sales in the U.S. & Canada and Europe, the Middle East, Africa and India (EMEA). Sequentially, net sales increased due to higher merchant olefins and aromatics sales, primarily in the U.S. & Canada.

Industrial Intermediates & Infrastructure

<i>In millions, except margin percentages</i>	Three Months Ended Dec 31			Three Months Ended Sept 30	
	<u>4Q23</u>	<u>4Q22</u>	<u>vs. SPLY</u> <u>[B / (W)]</u>	<u>3Q23</u>	<u>vs. PQ</u> <u>[B / (W)]</u>
Net Sales	\$2,948	\$3,653	\$(705)	\$3,035	\$(87)
Operating EBIT	\$15	\$164	\$(149)	\$21	\$(6)
Operating EBIT Margin	0.5%	4.5%	(400) bps	0.7%	(20) bps
Equity Losses	\$(57)	\$(96)	\$39	\$(63)	\$6

Industrial Intermediates & Infrastructure segment net sales were \$2.9 billion, down 19% versus the year-ago period. Local price declined 17% year-over-year. Volume was down 2% year-over-year driven by reduced supply availability. On a sequential basis, net sales declined 3% as seasonal increases in deicing fluid demand and volume gains in mobility were more than offset by seasonally lower volumes in building & construction as well as local price declines, primarily in EMEA.

Equity losses for the segment were \$57 million, compared to equity losses of \$96 million in the year-ago period, primarily driven by improved equity earnings at the Kuwait joint ventures. Sequentially, equity losses improved by \$6 million, primarily driven by improved equity earnings at the Kuwait joint ventures, which were partly offset by reduced equity earnings at Sadara.

Operating EBIT was \$15 million, compared to \$164 million in the year-ago period, driven by lower local prices in both businesses and reduced supply availability in Industrial Solutions. On a sequential basis, Op. EBIT was down \$6 million driven by seasonally lower volumes in building & construction which were partly offset by seasonally higher demand for deicing fluid and higher demand for mobility applications.

Polyurethanes & Construction Chemicals business reported a net sales decrease compared to the year-ago period, driven by lower prices in all geographic regions which were partly offset by broad-based business and geographic volume gains. Sequentially net sales declined, driven by lower local prices in EMEA.

Industrial Solutions business reported a decrease in net sales compared to the year-ago period, driven by reduced supply availability due to a continued outage at Louisiana Operations, lower demand for industrial applications, and local price declines. Sequentially, net sales declined as increased catalyst sales, seasonally higher deicing fluid demand and higher demand for mobility applications were more than offset by volume declines from lower supply availability.

Performance Materials & Coatings

<i>In millions, except margin percentages</i>	Three Months Ended Dec 31			Three Months Ended Sept 30	
	<u>4Q23</u>	<u>4Q22</u>	<u>vs. QLY</u> <u>[B / (W)]</u>	<u>3Q23</u>	<u>vs. PQ</u> <u>[B / (W)]</u>
Net Sales	\$1,894	\$2,058	\$(164)	\$2,130	\$(236)
Operating EBIT	\$(61)	\$(130)	\$69	\$179	\$(240)
Operating EBIT Margin	(3.2)%	(6.3)%	310 bps	8.4%	(1160) bps
Equity Earnings	\$6	\$4	\$2	\$5	\$1

Performance Materials & Coatings segment net sales in the quarter were \$1.9 billion, down 8% versus the year-ago period. Local price decreased 12% year-over-year with declines in both businesses. Currency increased net sales by 1%. Volume was up 3% year-over-year, driven by higher volumes in project-driven building & construction end-markets. On a sequential basis, net sales were down 11%, primarily driven by seasonally lower volumes in both businesses.

Operating EBIT was a loss of \$61 million, compared to a loss of \$130 million in the year-ago period, driven by lower costs as well as reduced planned maintenance turnaround activity. Sequentially, Op. EBIT decreased \$240 million, primarily driven by seasonally lower volumes.

Consumer Solutions business reported a decrease in net sales versus the year-ago period, primarily driven by lower siloxanes prices. Sequentially, net sales declined, driven by softer demand and seasonally lower volumes.

Coatings & Performance Monomers business reported a decrease in net sales compared to the year-ago period, driven by local price declines which were partly offset by higher volumes, primarily in the U.S. & Canada and EMEA. Sequentially, net sales decreased, driven by seasonally lower volumes in building & construction and traffic paint end-markets.

OUTLOOK

“In 2024, we will maintain our commitment to financial and operational discipline as we continue to navigate dynamic market conditions. While we expect softness in industrial and durable goods demand to continue in the first quarter, we are encouraged by early positive signals in areas including construction, automotive and consumer electronics,” said Fitterling. “Our strong balance sheet and cash generation give us the flexibility to cover all of our capital allocation priorities as we progress through the economic cycle and advance our Decarbonize & Grow and Transform the Waste strategies. These projects are expected to deliver more than \$3 billion in underlying earnings annually by 2030. Our cost-advantaged footprint, leadership in attractive end markets, and strategic growth investments position the Company well to create long-term value.”

[Link to online article](#)

Six Dow products win 2024 BIG Innovation Awards

- ◆ Recognized by Business Intelligence Group™ (BIG) Innovation for the 8th consecutive year
- ◆ Most accolades received in a single BIG Awards program by Dow

Dow has won six BIG Innovation Awards from the Business Intelligence Group™ in 2024, the most BIG awards Dow has ever received in a single year. This accomplishment also marks the eighth successive year that Dow has received recognition at the BIG Innovation Awards.

This annual business awards program recognizes organizations, products, and people that are bringing new ideas to life in innovative ways. Nominations are judged by a select group of business leaders and executives who volunteer their time and expertise to score submissions.



“Team Dow's deep rigor in engineering and science consistently deliver creative solutions to global challenges that simultaneously deliver better product performance and sustainability,” said [A.N. Sreeram](#), chief technology officer and senior vice president, research & development, for Dow. “We are extremely proud to achieve this recognition for the eighth consecutive year and secure the highest number of accolades in a single BIG Innovation Awards program.”

Organizations from across the globe submit their recent innovations for consideration in the BIG Innovation Awards. Dow products were recognized in the chemical and manufacturing sub-categories.

Learn more about Dow’s 2024 award winning products:

EcoSense™ 2470 Surfactant:

EcoSense™ 2470 Surfactant offers detergent manufacturers the opportunity to be part of tomorrow's sustainability ecosystem. Recycled carbon materials combine high performance with cutting edge climate tech to deliver quality and environmental benefits today to multiple home care products such as laundry detergents and hard surface cleaners. Adopters will benefit from a drop-in solution that doesn't compromise on the performance of traditional fossil-based surfactants, enabling a new circular carbon economy. Home Care products can now leverage a novel carbon capture-based approach for surfactant production.

SYL-OFF™ 7920NF Emulsion Coating:

SYL-OFF™ 7920NF Emulsion Coating is an advanced solution for superior release against pressure-sensitive adhesives. With water-repellency, toughness, and durability, this coating offers non-migratory, non-blocking features and excellent shear stability. Users can experience unmatched low foaming potential and an extended bath life in product applications with SYL-OFF™ 7920NF Emulsion Coating.

ELECPURE™ Electronic Grade Solvents:

In the realm of electronic device manufacturing, ultrapure chemicals like ELECPURE™ Electronic Grade Solvents play a pivotal role in ensuring the cleanliness and efficiency of electronic materials. Developed with an innovative and energy-efficient purification process, ELECPURE™ Electronic Grade Solvents remove >30 metal ion types to parts per trillion levels. Dow's purification process consumes 90% less energy than the conventional way, reducing carbon footprint¹. The impact is evident: enhanced manufacturing efficiency, increased device lifespan, and overall superior performance. This proven breakthrough is reshaping the landscape of electronics. Dow's innovative ELECPURE™ Electronic Grade Solvents can be used in photoresists, color resists, thinners and photoresist removers for semiconductor, display panel and various other challenging applications across the industry's manufacturing processes. ELECPURE™ Electronic Grade Solvents improve yields, device performance and enable next gen devices. These materials align with Dow's sustainability goals and have garnered recognition for their excellence.

(¹ Internal carbon footprint calculation based on ISO 14067.)

DOWSIL™ 2080 Resin:

DOWSIL™ 2080 Resin is a solventless liquid silicone resin that chemically reacts with organic resins to create silicone-organic copolymers. Its unique structure and low self-condensation tendency make it suitable for solventless processes, resulting in solid silicone-organic copolymers. These copolymers serve as high-quality binders for heat-resistant powder coatings, offering improved appearance. Unlike traditional coatings, which blend flake silicone resin and solid organic resin, DOWSIL™ 2080 Resin overcomes incompatibility issues. When used as a binder, it produces a high-quality coating with excellent leveling, gloss, and maintains heat-resistant performance.

RHOBARR™ 135 Barrier Coating:

RHOBARR™ 135 Barrier Coating is a waterborne latex designed for paper and paperboard coatings

in food packaging applications. This versatile emulsion is compatible with existing aqueous coating or printing methods and suitable for use in high-temperature applications such as ovens and microwaves. RHOBARR™ 135 provides excellent barriers to hot oil, grease, and fatty acids, block resistance, and film flexibility to maintain performance after folding. RHOBARR™ 135 is produced without intentional addition of fluorocarbons and provides users with a certified repulpable and recyclable solution to address market needs for safer and more sustainable oil and grease resistant food packaging.

DOWSIL™ TC-6032 Thermally Conductive Encapsulant:

DOWSIL™ TC-6032 Thermally Conductive Encapsulant, a two-part product with a 1 to 1 ratio, stands out as a versatile and flowable solution designed for efficient heat dissipation in electronic and electric components. Its flowable nature allows it to effortlessly fill and self-level after dispensing. Composed of a thermally conductive filler and polydimethylsiloxane, this heat-curable encapsulant is ideal for various applications, including on-board chargers, inverters, converters, transformers, and other sensitive components requiring effective thermal management.

The [Business Intelligence Group](#) was founded with the mission to recognize true talent and superior performance in the business world. The organization's proprietary and unique scoring system selectively measures performance across multiple business domains and then rewards those companies whose achievements stand above those of their peers.

"Humanity relies on innovation to improve our lives and the planet," said Maria Jimenez, chief nominations officer, Business Intelligence Group. "We are so proud to reward the products, people and companies helping to improve the lives of so many people."

Visit [Dow's website](#) for additional information and to explore the Company's [2022 Intersections Progress Report](#).

[Link to online article](#)

Dow funds seven new business and sustainability projects to drive social impact

- ◆ *Selected projects are part of the company's Business Impact Fund program*
- ◆ *Since 2016, the Impact Fund has supported 58 projects in 22 countries*

Dow announces its 2023 [Business Impact Fund](#) selections: **seven** projects that will help drive social impact and advance sustainability through collaboration. The annual fund brings together NGOs, nonprofit organizations and Dow customers to help solve global issues using Dow technology and employees' expertise.

"Our Impact Fund is about helping to solve some of the world's most pressing challenges while using our products for good and unlocking innovative business opportunities with our customers," said Bob

Plishka, global director of Strategic Corporate Partnerships and Dow Company Foundation president. “This year’s projects focus on addressing circularity and waste transformation initiatives while seeking to support society’s most vulnerable populations.”



People help collect materials through Delterra's Rethinking Recycling program. Dow is collaborating with Delterra through Dow's 2023 Business Impact Fund to support the program in Argentina.

2023 Business Impact Fund projects

- ◆ **Argentina: Driving Change for Waste Traceability and Recycling Rates** – Dow and [Delterra](#) are collaborating to improve the impact and transparency of waste management and recycling systems. Through an innovative material traceability tool using blockchain technology, recycled plastic can now be tracked from collection to new products and packaging. Tracking plastic allows companies to know exactly where their recycled materials are coming from. Dow also supports Delterra's Rethinking Recycling program in Bahía Blanca, intending to triple recycling rates by 2025. The project will help improve behaviors surrounding waste separation, recycling, and collection of materials. The project will increase recycling center capacity, help find material buyers and create jobs for cooperative waste workers.
- ◆ **Brazil: Project REUSE (Fridge Recycling Expansion)** – The next phase of Project REUSE, which focuses on enabling a circular economy for polyurethanes, will expand to the Southeast and Northeast regions of Brazil, combining efforts with an important value chain partner. The project's initial phase successfully focused on recycling mattresses and sofas in one city in Brazil. The second phase explored refrigerator recycling in multiple cities in Brazil. Now, the expanded program will focus on a larger area in Brazil, providing recycling services to more consumers and helping the industry to achieve the 2024 Brazilian Extended Producer Responsibility goal to recollect and recycle **12%** of total production. The project will continue to reduce improperly disposed waste, better manage refrigerant gases and help increase the amount of polyurethane recovered from equipment.

- ◆ **Mexico: Project Eztli** – Eztli (an Indigenous word related to blood, life and vitality) is a shared value project focused on advancing inclusion by fostering awareness about menstrual hygiene needs, connecting Dow’s silicone innovation in menstrual cups, educational campaigns, and health information initiatives. In collaboration with for-profit and nonprofit organizations such as MEXFAM and [United Way Mexico](#), the project will donate **80,000** menstrual cups to people in need in Mexico City, the State of Mexico and Queretaro City. The project also creates a strategic business opportunity for consumer rubber in the Mexican market.
- ◆ **South Africa: Soap for Hope** – Through a collaboration with [Diversey – A Solenis Company](#), a leader in cleaning and hygiene solutions for industrial and institutional markets, and the [Pebbles Project](#), a local NGO with decades of experience in education and health work services, this project aims to give a second life to soap bar waste from local hotels to the benefit of underserved communities in South Africa. Soap For Hope will engage, train and empower unemployed young adults and women to establish a collection network and recycling facility for used soap bars. In addition, a distribution network for the upcycled soap bars will be set up to promote sustainable sanitation and create a positive impact on local communities.
- ◆ **Thailand: Small Scale Pyrolysis Unit** – Dow will partner with the [Plastics Institute of Thailand](#) to support a small enterprise that developed low-temperature heat induction-based pyrolysis technology to convert low-value used flexible plastic packaging into pyrolysis oil and further process into circular feedstock for the Dow-affiliated cracker in Map Ta Phut, Thailand. Reintroducing post-consumer flexible plastic film into the value chain is an opportunity to increase circularity in Thailand's community waste management system.
- ◆ **Ukraine: Recyclable Grain Bags** – This project aims to support small and medium-sized farms and local industry by introducing a recyclable grain bag (sleeve) storage technology. With this technology, farmers impacted by the destruction of agricultural equipment have an opportunity to store their harvest in an easy and accessible way and preserve it until the point of usage or export, which helps prevent food waste. Dow is working with the Ukrainian Agrarian Council NGO and local business partners to simultaneously integrate a recycling concept for the bags to help close the loop and reduce plastic waste.
- ◆ **United States: Taking Care of our Home** – This project assesses the current recycling landscape and identifies strategies to improve recycling rates in key U.S. Gulf Coast communities where Dow operates. By uniting with our NGO partner, [The Recycling Partnership](#), our goal is to boost residential and commercial recycling rates in these communities, which contain most of Dow’s manufacturing footprint in North America.

Since launching in **2016**, the Impact Fund has supported **58** projects in **22 countries** totaling nearly **\$12 million** in investments. To date, the Fund’s projects have achieved the following outcomes:

- ◆ **>2,000** jobs created
- ◆ **>13,400 MT** materials recycled
- ◆ **>9,500 MT** of plastic diverted from a landfill or environment
- ◆ **46,000** acres of land protected

Dow employees worldwide nominate potential projects, and a diverse committee representing business and functional leadership across the Company selects the winners. Projects must meet the following criteria:

- ◆ Have the potential to address critical social issues or advance sustainability initiatives
- ◆ Be scalable in their design and impact
- ◆ Engage Dow customers and value chain partners
- ◆ And create new business opportunities for Dow



[Link to the online article](#)

A brand new sustainability experience

Chief Commercial Officer, Dan Futter, explains how Dow's new branding architecture helps customers navigate the complex world of sustainability.

Sometimes you have to take a look in the mirror to really see how your customers see you. We see our reflection through a variety of feedback channels and we are acting on what customers tell us.

Over the past few years, we found that more and more companies are making sustainability commitments. In parallel, there has been a significant change in the search terms customers use to find materials with sustainability attributes. Popular search engines are reporting similar trends. Terms like low carbon, biodegradable and recyclable have been gaining momentum. On top of that, we hear loud and clear that navigating chemical company websites for materials with sustainability benefit is particularly confusing, frustrating, and unproductive. No wonder, with the vast complexity of chemistries, applications, claims, and regulations that have to be sorted through to surface relevant products.

Armed with deeper insights about what customers are looking for, we set out to make it easier for them to connect their needs with our solutions – by surfacing our content, literally, on their terms.

Setting out to create a brand new sustainability experience.

Under the umbrella brand “[Sustainability Science](#)” we created six brand pillars representing the most commonly searched sustainability attributes: Low Carbon, Bio-based, Recycled Content, Designed for Circularity, Biodegradable and Resource Efficient.

When you look in the mirror, you also have to trust what you see there, just like your customers have to trust the integrity of the data they see.

So, the other half of our customer experience equation was to put a rigorous governance system in place, whereby our claims rely on technical knowledge, evidence, and lifecycle perspectives using recognized international standards and certification systems.

That transparency makes the hurdles much higher for our technical and marketing teams to clear, but it’s worth the effort. As a materials science company, the integrity of the performance claims of all our products are essential to earning trust from customers, shareholders and employees alike.

For the first phase of our rollout, we aligned over 300 products to the sustainability pillars, so customers can more easily search, understand and purchase those products by their attributes and applications.

It’s a system we believe our customers will grow to trust and count on as part of the way they meet their own public commitments, and how they develop products with sustainability benefits for their customers.

Over time, we’ll align more and more products to our brand pillars – and keep checking in the mirror to continuously improve how customers can choose Dow technologies for a more sustainable future.

[Check out the new experience](#)

Dan Futter, Chief Commercial Officer

[Link to the online article](#)

Investing in resilient watersheds: Loch Leven

“Partnerships like the one between Dow, TNC and Ecolab, focused on bringing solutions to sustainably manage scarce freshwater, are the key to ensuring abundant water and healthy ecosystems.”

- Andre Argenton, chief sustainability officer, Dow

Rivers like the Mississippi are critical corridors that connect cities and natural ecosystems alike. As the climate precipitation patterns change, water levels vary widely between extreme lows and highs. Water quality is also impacted as saltwater slowly moves upriver. These have extraordinary effects on people and nature.



Recognizing the important role industry and conservation organizations play in restoring healthy, functioning ecosystems, we are working with like-minded organizations like The Nature Conservancy and Ecolab to restore and enhance wetlands in the lower Mississippi Alluvial Valley in Louisiana. Called “Loch Leven,” this project is reconnecting flood plains to the Mississippi River by installing improved water control structures to increase water supply to 4500 acres of wetlands. Our team came in during phase 2 of the project to reconnect the internal water flow within those wetlands. This work followed phase 1, which connected the river to the wetlands. This project

is part of a larger effort by The Nature Conservancy to restore over 10,000 wetland acres.

Reconnecting a floodplain

Projects like Loch Leven help provide floodwater storage and improve water quality, all pivotal components of watershed management. By holding water and slowly releasing it, the wetlands on Loch Leven remove excess fertilizer runoff from upstream, and, in turn, those nutrients help the wetlands and all that live in it, thrive.

Floodplain restoration projects such as Loch Leven also provide hydrologic stability, meaning that they slow water down, hold it and slowly release it. The Loch Leven project will help provide 12.1 billion gallons (45.8 million cubic meters) of flood storage capacity to local communities in Louisiana.

“As our climate system makes weather events more variable, extreme and uncertain, the stability that nature provides is even more important,” said Bryan Piazza, Director of Science with The Nature Conservancy of Louisiana.

Collaborating for greater impact

The Mississippi Watershed is a water-stressed basin identified by the CEO Water Mandate’s Water Resilience Coalition (WRC) under the U.N. Global Compact. Investing in nature-based solutions like the Loch Leven project is one way to reduce nutrient runoff, restore biodiversity and enhance communities’ ability to adapt to climate change.

“The issue, however, is having the resources needed to work at the speed necessary to meet these threats in the Lower Mississippi Valley,” Piazza said. “There simply isn’t enough public grant money available to do the number of Loch Leven projects that we need in the lower river. That’s why it’s so important to figure out how to attract private investment in our work. Without it, we cannot get to the scale we need to improve water quality and habitat and remove greenhouse gases.”

As founding members of the WRC, companies like Dow and Ecolab are investing beyond their own operations and working collaboratively to enhance water stewardship management at the local watershed level.

“As the world’s natural resources come under ever-growing pressure, it becomes increasingly clear that businesses must work to find ways to help correct course and build a positive future,” said Emilio Tenuta, senior vice president and chief sustainability officer at Ecolab. “It is critical that businesses reach outside their facilities to work with those who share the same water resources and strive to ensure water availability, quality and access for all.”

For us at Dow, investments in projects such as Loch Leven contribute to the overall improvement of watershed health while advancing sustainable business growth. Everyone – including communities and industry - must play a role to protect our water resources.

“Water is central to our manufacturing process, and safe, accessible water is also essential to the health of the communities in which we operate, critical to ecosystems and integral to economic growth. Partnerships like the one between Dow, TNC and Ecolab, focused on bringing solutions to sustainably manage scarce freshwater, are the key to ensuring abundant water and healthy ecosystems,” said Andre Argenton, chief sustainability officer at Dow.

- *Carrie Houtman, EH&S and Sustainability Director*

[Link to the online article](#)

Dow earns top score in LGBTQ+ equality in Human Rights Campaign Foundation's Corporate Equality Index

Recognition marks Dow's 18th consecutive year receiving a perfect score on the Corporate Equality Index

Dow received recognition for its commitment to LGBTQ+ equality with a top score of 100 on the Human Rights Campaign (HRC) Foundation's 2023-2024 Corporate Equality Index (CEI). This marks the Company's 18th consecutive year receiving a perfect score on the Index, a national benchmarking tool measuring corporate policies and practices related to LGBTQ+ workplace equality.

"Promoting equality through our policies and practices enhances Dow's culture, creating an environment where everyone can thrive, and drives innovation and success," said **Amy Wilson**, Dow's general counsel and corporate secretary, and executive sponsor of GLAD, the Company's LGBTQ+ and ally employee resource group. "We are incredibly proud to once again receive this recognition, which is a testament to our consistent, multi-decade efforts championing LGBTQ+ rights."

Dow offers best-in-class policies and practices for employees, including those important to LGBTQ+ colleagues – equal benefits to same-sex partners for health, dental and life insurance, parental and bereavement leave, relocation, dual-career assistance, and survivor benefits. Dow has enhanced its Total Rewards to be more inclusive in its coverage, furthering the Company's leadership in equitable offerings. As a part of that initiative, Dow established global minimum standards for paid time off for new parents and family caregivers – which includes birthing and non-birthing parents, regardless of gender, as well as adoptive and foster parents. In the U.S., fertility benefits coverage has expanded to be more accessible to same-sex couples.



"Being truly inclusive requires an ongoing commitment and continuous improvement to identify gaps in policy that adversely impact our employees and take the actions needed," said Louis Vega, president of Dow North America and vice president of Government Affairs & Advocacy. "I am pleased that Dow has been recognized for its work and focus for 18 consecutive years."

Dow advocates for public policy around the world to help bring fairness and equal treatment to the LGBTQ+ community. As part of this commitment, Dow continues to support the Equality Act, a comprehensive federal framework that ensures fairness and opportunity for all. This year, the Company reaffirmed its commitment to LGBTQ+ rights by signing HRC's Count Us In Pledge. Globally, Dow shares best practices with other like-minded organizations, leading the way toward a more inclusive, diverse and equitable workplace and world.

The CEI rates companies on detailed criteria falling under four central pillars:

- ◆ Non-discrimination policies across business entities;
- ◆ Equitable benefits for LGBTQ+ workers and their families;
- ◆ Supporting an inclusive culture; and,
- ◆ Corporate social responsibility.

The full report is available online at www.hrc.org/cei.

[Link to the online article](#)

Volunteering at the core of a healthy mangrove forest in Thailand

Through their volunteer efforts in Thailand, Team Dow is helping support the Company's sustainability targets to protect the climate, transform plastic waste and close the recycling loop.

For more than a decade, Dow Thailand volunteers have worked to protect the defenders of the coastline – mangrove trees. Just as the seedlings they've planted have taken root and grown, so has the impact of the team's protection and restoration efforts.

Today, the Dow & Thailand Mangrove Alliance is taking mangrove conservation to the next level and engaging both public and private sectors as well as surrounding communities in reducing the impact of climate change and marine debris.



As we celebrate **International Volunteer Day**, we recognize that more than 75% of Team Dow volunteered at least once in the past year, which correlates with a more positive employee experience and higher satisfaction levels.

In Thailand, Team Dow is taking action together with local governments, the community and NGOs, the impact has grown from planting trees to educating local people about the value of the mangrove forest, while initiating sustainable tourism to support the local economy.

THE CHALLENGE

Mangroves are woody trees or shrubs that live on muddy coasts between land and sea. Their strong and complicated root systems enable them to protect shorelines from damaging waves and floods, reduce coastal erosion, improve water quality by filtering pollutants and act as nurseries for marine life.

Part of the “blue carbon” ecosystem, mangroves also can help capture greenhouse gases and help mitigate climate change impact by acting as powerful carbon sinks. That is, they absorb carbon dioxide from the air and store the carbon in their roots, branches and surrounding sediment – for up to a millennium, if left undisturbed.

That is why mangroves need our protection and restoration. But mangrove ecosystems in Thailand and across the world are under threat – damaged by coastal development, harmful fishing and farming practices, as well as pollution.

THE SOLUTION

Our team in Thailand has taken a multifaceted approach to conserve mangroves. Many of its efforts are conducted through the Dow & Thailand Mangrove Alliance, a collaboration between Dow Thailand, the Department of Marine and Coastal Resources, the Ministry of Natural Resources and Environment, and the International Union for Conservation of Nature. Actions include:

- ◆ **Ongoing reforestation:** About 15 years ago, Dow volunteers started to plant mangrove trees near our manufacturing site in the Pak Nam Prasae sub-district of the Rayong province, transforming a degraded land into a rich forest. Today, the Alliance aims to advance the conservation of mangroves along the coast of Thailand, covering five provinces on more than 5,000 rai (approximately 2,000 acres) of land.
- ◆ **Raising awareness and promoting eco-tourism:** With the support of local communities, we are helping promote the Pak Nam Prasae mangrove forest as a tourist attraction. The forest acts as a natural classroom and includes name cards identifying plants and signage explaining the forest’s ecological benefits. In 2022, we also worked with other partners to launch the [iNaturalist application](#), which enables young people and the public to safely and sustainably explore mangrove wildlife.
- ◆ **Collaborating with partners to tackle marine debris:** Mangroves retain marine debris and prevent it from entering the sea. Team Dow volunteers regularly participate in cleanups, and the Alliance has created a model for waste management in the Pak Nam Prasae conservation area, passing on knowledge to the communities and visitors.
- ◆ **Promoting carbon credit mechanisms for mangroves:** Last year in Thailand, we sponsored the first “[Blue Carbon Conference](#),” inviting government authorities, businesses,

academic sectors, NGOs and local communities to brainstorm for collaborative ways to protect the wetlands and reduce climate change.

The holistic mangrove conservation program not only is beneficial to carbon reduction and biodiversity, but also creates economic and social benefits for local communities through income from a carbon credit system and tourism.

Inspiring others to act

Mangrove protection is a collective and long-term journey, calling for the efforts of individuals and organizations. Through their volunteer efforts in Thailand, Team Dow is helping support the Company's sustainability targets to protect the climate, transform plastic waste and close the recycling loop.

On #IVD2023, we celebrate our volunteers in Thailand and worldwide who harness collective power to make an impact and exemplify the spirit of #IfEveryoneDid.

[Link to the online article](#)

From courses to communities, Dow and WM drive sustainability

Through creative collaborations with like-minded companies such as WM, we can help advance the well-being of people and the planet.

Together, we're developing a blueprint for sustainability in communities and sports, helping events like the Grant Thornton Invitational address its environmental footprint.



Given golf's intrinsic connection to nature, the significance of advancing sustainability in the sport cannot be overstated. And there's a growing responsibility to ensure its impact on the environment aligns with modern values for futureproofing. Doing so not only minimizes the ecological footprint of golf tournaments, course management, and other golf-related activities, but also sets a powerful example for fans, athletes, sponsors and brands alike. In alignment with such values, the inaugural

Grant Thornton Invitational golf tournament sought the expertise of two companies known for their expertise in sustainability: Dow and WM.

Two Brands, One Sustainability Mission

WM's broad reach as a comprehensive environmental solutions provider and our leadership in materials science are bringing enhanced levels of sustainability and innovation to a variety of spheres – one of which is golf. For example, leveraging insights learned respectively from the acclaimed WM Phoenix Open and Dow Great Lakes Bay Invitational, WM advises the PGA TOUR on sustainability, while Dow serves as the Official Sustainability Resource for the LPGA and Ladies European Tour.

Both WM and Dow collaborate closely with the GEO Foundation for Sustainable Golf (GEO), an organization dedicated to championing sustainability in golf worldwide. Through this work, the 2019 Dow Great Lakes Bay Invitational became the first-ever GEO-Certified LPGA event, while the 2017 WM Phoenix Open became the first GEO-Certified PGA TOUR event. The GEO Certification acknowledges adherence to the highest sustainability standards in golf.

Just as the LPGA and PGA TOUR's best teamed up on the golf course at the Grant Thornton Invitational, WM united their strengths with ours to elevate the sustainability program of the tournament, further demonstrating their shared dedication to advancing environmental responsibility in and beyond the sport.

A Closer Look at Dow & WM's Sustainability Initiatives

With the potential to reach millions, professional golf events like the Grant Thornton Invitational provide unparalleled opportunities to educate and raise awareness of environmental issues and sustainable solutions. Our companies came together to advance the shared goal of driving sustainability through carefully planned and executed initiatives at the tournament, including:

- ◆ Careful analysis of the tournament's footprint, such as tracking water and other natural resource usage, to support the development of a phased emissions reduction plan.
- ◆ A commitment to recycling, exemplified by using recycling and trash bins crafted from recycled cardboard.
- ◆ Active engagement with event attendees to foster a culture of environmental sustainability through educational efforts, such as clarifying the distinction between recyclable and non-recyclable materials.
- ◆ On-site sorting efforts to separate recyclable materials effectively, paired with pre-event guidance distributed to vendors outlining preferred items for on-site use.
- ◆ Collaboration with caterers to facilitate food donations.

Our partnership with WM extends beyond the realms of the Grant Thornton Invitational – and golf. In November 2022, we co-launched a residential collection program in North America, specifically designed for hard-to-recycle plastic, including items like grocery bags and shrink wrap. In select

markets, consumers now have the convenience of placing these materials directly in their curbside recycling, with WM handling the processing at their nearest state-of-the-art recycling facility. Once at full capacity, the program is anticipated to divert a notable 120,000 metric tons of plastic film away from landfills each year. Looking ahead, we are excited to expand our collaboration with WM in the future, through the sponsorship of the 2024 WM Phoenix Open. During the Grant Thornton Invitational, our teams participated, together with WM, in great discussions around best practices in the worlds of DEI, sustainability and purpose-driven sports marketing, that will help guide future collaborations – stay tuned!

Driving ahead

By embracing innovative, environmentally conscious practices, it is possible to future-proof professional golf while inspiring a broader audience to champion sustainability. For us and for WM, golf isn't the final destination, but rather just one of the platforms being leveraged to amplify the use of environmentally responsible practices, and to develop game-changing, sustainable innovations and collaborations.

[**Learn more about Dow's Partnerships in Golf**](#)

[**Learn more about Dow and WM's Recycling Program**](#)

Carlos Padilla II, Head of Global Sports Partnerships at Dow

[Link to the online article](#)