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THOUGHT LEADERSHIP PANEL
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Innovation

Bringing technological advancements to life

In this week's Thought Leadership Roundtable, leaders at AES, Cummins, and Corteva, weigh in on the importance of innovation in their respective industries and offer examples of the innovations they're bringing to life for the greater good.

Q: How does innovation play a role in your day-to-day operations?

Brandi Davis-Handy: Innovation is key to being the best utility partner for our customers. It helps us adapt to ever-changing customer expectations, including their desire for more information and tools to make choices about their energy use. Innovation touches all aspects of our operation. AES Indiana is focused on investing in a smarter and greener energy future. New technologies are making it possible to better meet customers' objectives of reliability, affordability, and sustainability. We're transitioning to a diverse energy mix and incorporating advanced technologies like energy storage, which are game changers for grid reliability and sustainability. Our smart-grid investments are transforming our electricity network into a two-way system allowing real-time communication between us and our customers. One key component of having a smarter grid is Advanced Metering Infrastructure, or AMI. AES Indiana completed the rollout of AMI in 2023, which marked a major advancement in customer engagement and energy management.

Brett Merritt: Innovation is at the core of Cummins, driving our vision and shaping our identity. As the creator of products that power some of the world's most demanding and economically important industries, we play a critical role in the broader transition to a clean economy.

Our Destination Zero strategy is our bold commitment to clean energy solutions, and we believe it is a critical opportunity for growth, both for Cummins and our customers. We've rewritten the narrative of this industry before, and now we'll do it again. In this new chapter of innovating for low-carbon technologies, there is no company better positioned to lead.

Wendy Srnic: At Corteva, we are, first and foremost, a technology company. And we are proud to call Indiana home—so much of the technology we use globally is born right here at home. In fact, we invest nearly $4 million every day of the year in innovation. Our scientists are not only looking at the challenges of today, but consistently looking ahead—more than 10 years ahead—to anticipate what farmers and growers will need to increase the number of crops they can grow—all while addressing a changing climate, new pest and disease pressures, a growing population, and consumer demand for more sustainability.

Newer technologies, such as gene editing, open entirely new ways to meet these challenges by developing products such as disease-resistant crops. Artificial Intelligence and machine learning are enabling us to virtually screen and iterate more hybrids, genes, proteins, and crop protection products than ever before, fueling innovation in every area of our science. We could not be more excited to bring all these tools to the hands of farmers, including those here in Indiana.

Q: With technological advancements happening faster than ever before, how do you stay ahead of the curve in your industry—or at least avoid falling behind?

Brett Merritt: We're investing more than $1 billion over the next few years into our Indiana, New York, and South Carolina engine manufacturing plants alone. This is a record level of investment, which will provide upgrades to those facilities to support the production of our industry's first fuel-agnostic engine platforms. These engines are designed to operate on low-carbon fuels such as natural gas, diesel, and ultimately hydrogen, marking a significant step in decarbonizing the nation's truck fleets.

We recognize both the duty and the opportunity to utilize our expertise in developing sustainable solutions that empower our customers, benefit our communities, and safeguard our planet for future generations. Innovation is not a challenge we shy away from—it's a path we eagerly tread, evidenced by our substantial investments. This initiative serves as a prime illustration of our commitment to innovation and progress.

Wendy Srnic: We have a long tradition of championing innovation both internally and externally, in part through collaborations to engage the global scientific community. For example, we recently launched Corteva Catalyst, an initiative to identify and bring to market the next generation of technologies to help farmers produce more food and feed through collaboration, all while conserving resources and sustaining the land. Today, a lot of early-stage innovation happens in the start-up ecosystem, but there are a limited number of players that can deliver this innovation directly into growers' hands. Through Corteva Catalyst, our goal is to pair our world-class expertise and resources with the agility of start-ups and universities. As the only American global company in our industry, we have the footprint, expertise, and go-to-market infrastructure to support the development and commercialization of the ground-breaking innovations farmers need and demand.

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Brandi Davis-Handy: Last November, we received approval of our EV plan, which includes our Public Use EV Pilot Program and EV-specific rates and tariffs. All programs are designed to encourage EV use and the adoption of EV infrastructure in our service territory. In 2023, we saw EV registration in our service territory approximately double.

Our three-year plan includes a program that dedicates funds to help ensure that all AES Indiana customers have convenient access to charging infrastructure, including in economically distressed or ethnically diverse areas. Additionally, we will provide rebates to encourage customer investment in Level 2 charges and direct current fast-charging equipment to serve Public Use EVs. We will also offer a managed charging program for our residential customers to enable better load forecasting to mitigate the potential for overloaded grids. We believe the future is electric, and by working together with our customers we will get there in a way that benefits everyone.

Q: Please share an example of a successful innovation your company has recently introduced and explain the impact it's having.

Wendy Srnic: It's exciting to share a little about the Enlist® Weed control system, discovered and developed right here in Indianapolis. Our Enlist® Weed Control System is a comprehensive technology enabling farmers to safely, flexibly, and responsibly manage hard-to-control and resistant weeds in soybeans, cotton, and corn. Today, our Enlist E3® soybeans are preferred by farmers across America. Co-developed with M.S. Technologies in Adel, Iowa, my team of biotechnology scientists developed soybeans tolerant to three of the most effective herbicides developed. These traits were then incorporated into high-yielding soybean varieties, including Corteva's Pioneer® brand A-Series and premier Pioneer® brand Z-Series soybeans. Advanced formulation technology substantially reduces the physical drift and volatility of Enlist herbicides, meaning it stays where it's sprayed. This is a great example of our commitment to sustainable agriculture. I'm also proud that elements of the Enlist Weed control system have won many industry recognitions, including three different AGROW Awards.

Brandi Davis-Handy: AES Indiana is making significant strides in enhancing the reliability and resiliency of the electricity transmission system by being first in the nation to test innovative solutions, such as LineVision's Dynamic Line Rating technology to meet historic demand. This technology continuously assesses the thermal carrying capacity of transmission lines, which could enable us to increase grid-carrying capacity quickly and affordably in the future—particularly for renewable energy integration. With this new technology, we are putting more energy on the grid as quickly and safely as possible. As our communities continue to grow, technologies like this allow us to ensure the reliability that our customers depend on.

Brett Merritt: At Cummins, we are proving that decarbonization in the world's hardest-to-abate sectors is possible. Our Cummins HELM™ fuel-agnostic platforms will help customers meet their sustainability goals and business needs with different components for different fuel types. Each engine version will operate using different single fuels, including diesel, natural gas, octane, and hydrogen.

On Leap Day, we debuted the next generation of our legendary diesel engine and the most fuel-efficient heavy-duty diesel engine ever: the X15, part of the Cummins HELM™ portfolio. It will serve the heavy-duty, on-highway market, where we've built our 100-year-plus legacy for dependability and power. The X15 will be compliant with U.S. EPA and CARB 2027 aligned regulations at launch. This Next Gen X15 delivers cutting edge technology designed to power the next generation, with lower impact on our planet.

Q: What is your company's greatest strength right now and its greatest opportunity for growth?

Brandi Davis-Handy: AES Indiana's greatest strength is our people, who have a deep commitment to and understanding of the communities we serve. Our local expertise is complemented by our global parent company, The AES Corporation, which provides our customers access to resources, tools, and expertise from around the world that benefit the people of Indianapolis. Our ability to leverage global resources is assisting us in achieving our goals of clean, reliable, and affordable energy solutions. When we work together, our communities can emerge from the energy transformation stronger. Additionally, we can attract new jobs in the industries of the future, with benefits shared widely across all customers.

Brett Merritt: Our greatest strength is our diverse, capable workforce, which provides the true ingenuity and engineering to develop cutting-edge solutions for our customers. Cummins continues to build deep expertise in the industrial power market as shown by the more than 5,000 engineers employed near our southern Indiana headquarters and our new technical centers in India and China. This talented workforce enables one of our core capabilities: partnership. Through partnerships with PACCAR, Daimler, Isuzu, Komatsu and others, we are driving the largest growth opportunities in our industry.

Wendy Srnic: Momentum. Corteva will soon celebrate its fifth anniversary as a standalone company, and it's been a great five years. Some of our product launches in corn and soy—such as Vorceed™ Enlist® corn and Enlist E3® soybeans—along with over 100 years of hybrid corn breeding heritage, have been delivering results for farmers across America for years. Likewise, launches of crop protection products such as Adavelt™ give farmers more flexibility and outstanding defense against more than 20 diseases in more than 30 crops.

Looking forward, our robust seed and crop protection innovation pipeline is positioned to deliver over 300 new products this year alone—plus an entire next-generation suite of biotechnology traits, crop protection products, and biological products for our farmers and growers over the next 10 years. These are all designed to meet the challenges I spoke of earlier, while increasing yields.

Finally, reflecting our passion for finding new tools for farmers, we are increasing our annual investment in R&D to capitalize on game-changing technologies. I'll say it again—I could not be more excited about the future here at Corteva.

Q: What emerging technologies or trends are likely to have the biggest impact on your business in the next five years, and how are you preparing for them?

Brett Merritt: Climate change will continue to shape our industry and our manufacturing as we work toward decarbonization. We're advancing our core business technology while accelerating our zero-emission technology so that we can go further, faster, and prove that decarbonization in the world's hardest-to-abate sectors is possible.

We're also leveraging data and predictive analytics to make maintenance and service more proactive. This is creating a monumental change in the customer experience. Instead of waiting for an issue to arise, customers can now identify and address it before it disrupts business or requires more costly service. As our data accumulates and algorithms evolve, we'll also evolve how we operate other parts of our service network. We can have the right parts and technicians available before a vehicle even arrives at a service

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location, reducing downtime. These capabilities are essential. You can't have a safe, successful autonomous vehicle without first having the right data and algorithms in place.

Wendy Srnic: We believe the next step change is gene editing. This is a more precise, efficient way of plant breeding with the potential to accelerate nature and provide solutions to address our climate, productivity, and sustainability needs around the world. Further, tools such as AI and machine learning are helping us move research from labs and fields to virtual environments where we can test and iterate at unprecedented rates—accelerating discovery overall, as well as the breadth of new discoveries. These capabilities promise to not only help farmers keep pace with the growing global demand for more, and higher quality, food, but also help develop the next generation of technology that will further improve on-farm sustainability. So, the real answer is that the next groundbreaking technology is going to be driven by the need to produce more food, in a sustainable way. This belief is at the core of our innovation pipeline and our billion-dollar-plus annual investments.

Brandi Davis-Handy: Artificial Intelligence, when used responsibly, provides AES Indiana the opportunity to optimize and elevate the customer experience. For example, AES Indiana implemented AI in our call center to improve our quality assurance processes. Currently, our call center agents manually review call recordings to identify trends and opportunities for how we can improve our customers' experience. Since this is completed manually, we can only review a certain number of recordings any given day, week, or month. With AI, we can automate this task, making the analysis and aggregation of data faster, leading to improved outcomes for our customers. Ultimately, AI is helping us enhance job performance and provide better, more personalized customer service experiences.

Q: What are some of the biggest challenges your industry faces in the next 10 years?

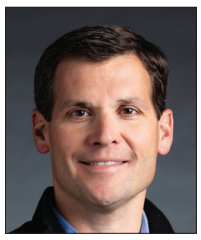
Wendy Srnic: We talk a lot at Corteva about the need to produce more food. But that's just half the battle—once it's grown, that food needs to get from the farm to people's kitchen tables. Geopolitical events, such as war and conflict, combined with non-science-based regulation, have a profound impact on how—and whether—food can cross national borders. So at Corteva, as my team works in labs and fields, alongside farmers, to find technology solutions to global food challenges, we also work alongside regulators and policymakers in capitals around the world to ensure that sound, science-based policy is in place, so that people from Manilla to Ames to Kiev to Pretoria have access to sufficient amounts of safe, nutritious food. In today's political environment, this is not always easy.

Brandi Davis-Handy: The energy industry is going through historic change that is affecting the U.S. electric system, which was developed more than 100 years ago, and every aspect of how we serve our customers. Substantial investments are underway to meet the energy demands of the future while we modernize our grid and personalize interactions with our customers. AES Indiana must balance these large investments with the need to maintain affordability for our customers. As we continue to use innovation, we are committed to keeping affordability at the forefront of the decisions we make.

Brett Merritt: Our industry is changing rapidly. We're seeing some of the largest changes in generations. As we focus on an advanced range of power solutions to meet customer needs, the infrastructure surrounding alternative fuel options becomes critical. Diesel, for example, already has the infrastructure in place needed to produce, transport, and distribute fuel. Fuels like hydrogen and natural gas have room for growth, and we are focused on supporting the additional infrastructure needed to help our customers adopt these technologies.

Regulation is a significant factor in the adoption rate of decarbonized solutions in our industry given application differences and regional differences. Rather than pursuing a single path that may lead to a dead end, we must recognize the benefits of offering and incentivizing a variety of zero- and low-emission solutions for the transportation sector and the environment. We are committed to achieving zero emissions by 2050. We serve customers in nearly all sectors, including buses, construction, agriculture, mining, marine, and heavy-duty trucking, understanding that there is no one-size-fits-all solution. Therefore, we continue to advocate for and invest in a diverse portfolio of solutions. Where practical and feasible, we have our Accelera by Cummins' suite of zero emissions products; for the segments that are harder to decarbonize, we have a variety of power solutions to meet customer needs as they navigate their journey to zero.

Brandi Davis-Handy has more than two decades of leadership, customer and stakeholder engagement, communications, and marketing experience. As President of AES Indiana, she leads a team focused on day-to-day operations and advancing the customer experience of more than 520,000 customers. Brandi is an active community leader who serves on numerous boards and committees.



As President of Cummins' Engine Business, **Brett Merritt** pushes the boundaries of customer-focused innovation to position Cummins as the leading powertrain supplier of choice. In 2023, the engine business generated $11.7 billion in revenue and delivered 1.3 million engines worldwide. Active in his community, Brett resides in Columbus, Ind., with his wife and three children. He has degrees from Indiana University and Harvard Business School.

Wendy Srnic heads Biotechnology at Corteva–leading the team that discovers and develops the company's seed biotechnology and gene edited trait product pipeline. She has held various leadership positions in seed genetics, breeding, crop protection, and innovation management within Corteva and other companies. Wendy developed a passion for agriculture growing up on her family's farm in Michigan and earned her Ph.D. from North Carolina State University.

Content paid for by AES, Cummins, and Corteva.