



## *News Release*

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***FOR IMMEDIATE RELEASE***

**BENDIX ACUÑA IMPLEMENTS SUSTAINABILITY MEASURES EXPECTED TO  
YIELD A 1,600-TON REDUCTION IN CARBON EMISSIONS**

*\$1.7 Million Project Comprising Solar Arrays, High-Efficiency HVAC, and Building Enhancements  
Will Contribute Absolute Reductions in Emissions Even as Production Grows*

**AVON, Ohio – March 27, 2023** – Since 2020, an aggressive CO<sub>2</sub> reduction effort has been underway at the Acuña, Mexico, manufacturing campus of Bendix Commercial Vehicle Systems LLC (Bendix). Now, after major efficiency enhancements, including upgraded HVAC systems, modernized building envelopes, submetering and building management systems, and the addition of solar energy, the location is on track to reduce its emissions by about 3,820 tons while saving close to \$805,000 a year in energy costs.

Bendix, together with its parent company, Munich, Germany-based Knorr-Bremse, approved climate action projects for the Acuña campus, which opened in 1988. The projects support a larger climate action plan set toward reaching Knorr-Bremse's Science-Based Environmental Targets that are themselves modeled after strategies in the United Nations' Sustainable Development Goals for SDG 13 Climate Action.

All told, the efforts should result in reduced greenhouse gas emissions in line with the company's long-term sustainability goals. Key among them is the commitment by Bendix and Knorr-Bremse to cut scope 1 and scope 2 CO<sub>2</sub> emissions in half by 2030.

Bendix is the North American leader in the design, development, and manufacture of active safety, air management, and braking solutions for commercial vehicles. Knorr-Bremse is the global market leader of braking systems for rail and commercial vehicles.

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The Acuña campus' aggressive CO<sub>2</sub> Reduction Program spans investments at multiple buildings on the growing campus, with a total commitment of more than \$3,800,000 to support reduced energy use, improved energy efficiency, and better oversight and control of energy consumption. This includes a \$1 million project to install solar arrays at two Bendix Acuña manufacturing sites. The solar arrays are expected to supply around 10% of the energy needed for the bustling campus.

The solar projects are expected to save the campus around 2 gigawatt-hours (GWh) of electricity during 2023, which is about the same amount of energy needed to power 100 homes for a full year. Together with the energy efficiency projects, the combined total efforts over the three-year period (2020-2022) are expected to cut CO<sub>2</sub> emissions by 3,821 tons a year.

“Among our North American locations, Bendix Acuña stands out for having pursued more aggressive sustainability and CO<sub>2</sub> reduction measures that are leading the way for our entire organization,” said Maria Gutierrez, Bendix senior director of environmental, social, and governance (ESG). “What started out 15 years ago with a focus on energy reduction and reduced costs has advanced, and we’ve taken on a much larger challenge. The team in Acuña is driving to ensure that no matter how much the operation grows, we remain committed to achieving absolute reductions in our overall carbon footprint – effectively decoupling growth from environmental impact.”

Gutierrez explained that Acuña projects will pursue this new challenge through three primary levers: pursuing energy efficiency projects; decreasing its energy consumption; and increasing its use of clean, renewable energy.

### **Adding High-Efficiency HVAC**

Assessment of the facility's energy consumption showed that its HVAC system, compressed air, and lighting systems were among the top energy consumers, leading to some of the key upgrades. The first of the facility's major efforts has involved installing upgraded HVAC units in Acuña Plant 1. Its 24/7 operations put additional strain on the building's HVAC and compressed air systems, but audits revealed that updates would allow for greater management, efficiency, and control.

During the first phase in 2020, the company invested in four 50-ton, high-efficiency, roof-mounted HVAC units to replace 13 interior ceiling-mounted units in the machining area that were more than 15 years old. The \$438,000 investment also included the addition of ducting in the building to improve the distribution of cooled air.

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The new equipment is 50% more efficient than the old system and is expected to reduce energy use by around 966,000 kilowatt-hours (kWh) per year, yielding energy cost savings of \$72,500 per year and a six-year return. The upgrade will also create a significantly more comfortable working environment and contribute to plant safety, as it eliminates the need for scissor lifts to maintain the HVAC equipment.

“The new units are much more efficient than our old system and have allowed us to purchase units with a 25% lower capacity,” said David Rountree, assistant plant manager for Bendix Acuña and a member of the facility’s CO<sub>2</sub> Reduction Program team. “So not only are these units going to be more efficient, but we’ll also need fewer of them. And we’re anticipating that people are going to be much more comfortable too.”

Ancillary benefits of the system include its capability to be integrated with a building management system, while also helping to phase out some of the less environmentally friendly refrigerants used by older equipment.

### **Building Envelope and Facilities Upgrades**

In a related multi-building project designed to reduce energy consumption and increase efficiency, the campus completed building envelope improvements for Acuña’s manufacturing plants 1, 2, and 3. Openings and doors around the facilities – used for forklift access, receiving, access to waste areas, and personnel entrances – were refurbished with custom-made high-speed automatic doors. Entrances were also equipped with air curtains blowing thin currents of air to separate indoor and outdoor spaces. The air curtains help maximize energy savings by keeping temperature-controlled air inside the building, while helping to block outside air, insects, dirt, and humidity from coming inside. The improvements, at a cost of around \$165,000, are expected to lead to energy cost savings of close to \$50,000 per year and will reduce energy use by close to 800,000 kWh.

The facility also installed building management systems at plants 1, 2, and 3, a \$121,000 investment expected to cut energy consumption by 140,000 kWh per year. The systems allow for centralized integration, management, and control of lighting, compressors, and HVAC systems, further increasing the overall efficiency of the systems connected and reducing energy consumption.

### **Producing and Procuring Green Energy**

Besides these efficiency and conservation-focused efforts, the Acuña campus is also tapping another sustainability strategy by generating its own green energy. In late 2021, Knorr-

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Bremse approved plans to install two solar arrays, one each at Acuña plants 1 and 2. The \$1 million investment – which went online at the end of 2022 – resulted in the installation of two photovoltaic systems capable of generating 2 gigawatt-hours (GWh) of renewable electricity annually. Each system is expected to supply around 10% of the energy needs at each facility. And together, the installations will help the campus avoid 850 tons of CO<sub>2</sub> emissions – an approximate 10% year over year reduction from 2021 – and save the site around \$170,000 in energy costs per year.

The solar arrays also represent the first such systems installed by a manufacturing organization in the Acuña region, and the second such investment for Bendix North America: The company completed its first solar array, a 1.168-megawatt installation, at the Huntington, Indiana, campus in August 2021.

Yet another investment in green energy is reflected in Acuña's new energy contract that began in 2022. As part of the new contract, the supplier guarantees that as much as 50% of the electricity supplied will be produced from renewable sources.

"Together with our investment in solar power, a new energy contract utilizing 50% green energy, and our wide-ranging building improvements, Bendix Acuña is well on its way to contributing to the organization's far-reaching climate goals," Gutierrez said. "Our Acuña facility is growing, but with the changes we're making, we plan to do so without increasing greenhouse gas emissions."

### **About Bendix Commercial Vehicle Systems LLC**

Bendix Commercial Vehicle Systems, a member of Knorr-Bremse, develops and supplies leading-edge active safety technologies, energy management solutions, and air brake charging and control systems and components under the Bendix® brand name for medium- and heavy-duty trucks, tractors, trailers, buses, and other commercial vehicles throughout North America. An industry pioneer, employing more than 4,400 people, Bendix – and its wholly owned subsidiary, R.H. Sheppard Co., Inc. – is driven to deliver the best solutions for improved vehicle safety, performance, and overall operating cost. Contact us at 1-800-AIR-BRAKE (1-800-247-2725) or visit [bendix.com](https://www.bendix.com). Stay connected and informed through Bendix expert podcasts, blog posts, videos, and other resources at [knowledge-dock.com](https://www.knowledge-dock.com). Follow Bendix on Twitter at [twitter.com/Bendix\\_CVS](https://twitter.com/Bendix_CVS). Log on and learn from the Bendix experts at [brake-school.com](https://www.brake-school.com). And to learn more about career opportunities at Bendix, visit [bendix.com/careers](https://www.bendix.com/careers).

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