2024 SmartWay Leader: Schneider

ABOUT COMPANY

Schneider is a provider of transportation, intermodal and logistics services, offering a broad portfolio including truckload, intermodal, brokerage, and supply chain management. For nearly 90 years, Schneider has provided customer experiences and innovation through its digital marketplace, Schneider FreightPower®.

For more information, visit our website:
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SMARTWAY *PROFILES IN LEADERSHIP* AREA OF EMPHASIS.

Technology Innovation — New equipment or associated supporting infrastructure to move and deliver goods more efficiently in the freight supply chain network. (e.g., electric or alternatively powered vehicles, autonomous vehicles, etc.).

"We are driven by our commitment to sustainability and innovation to be one of the first carriers to embrace electric vehicles as a powerful solution for hauling freight. We believe in a future where clean technology helps transform the way we move goods and reduces our environmental footprint while delivering on our promises of efficiency and reliability for customers."

- Mark Rourke, President and CEO

SCALING DEPLOYMENT OF BATTERY ELECTRIC, CLASS 8 TRACTORS.

Schneider's corporate goals include a commitment to being an industry leader in sustainability and sharing customers' goals for reducing transportation's impact on the environment. These overarching sustainability goals include reducing CO_2 emissions in progressively more stringent milestones through 2035. Zero emission trucks have helped accelerate progress toward these goals and Schneider was an early adopter of using battery electric vehicles (BEVs) to explore their potential for zero-tailpipe emission options for transporting freight. In 2023, Schneider began operating a fleet of 92 Freightliner eCascadias at its Southern California Operations Center in South El Monte. This initial deployment of BEVs allowed Schneider to gain a better understanding of zero emission shipping technologies and how to bring those technologies to scale within their operations.

Getting its BEV fleet and charging stations activated was no small feat. It took more than three years and involved close collaboration with utility, government bodies and original equipment manufacturers (OEMs).

Schneider worked alongside Daimler Truck North America (DTNA) as the eCascadia evolved, piloting a truck for six months in 2020-2021 through the Freightliner Customer Experience Fleet to provide valuable insights to lay a foundation for Schneider's initial BEV deployment.

Adding electric vehicles was only part of the equation for Schneider. One of the most challenging aspects of incorporating BEVs into their fleet was the infrastructure enhancements needed to operationalize the charging stations. To power its electric fleet, Schneider undertook a large construction project to build a charging depot about half the size of a football field. The depot includes sixteen 350 kW dual-cord dispensers and can charge 32 trucks simultaneously. Trucks achieve an 80% charge within 90 minutes, with a typical driving range of up to approximately 220 miles. Beyond the technical aspects of the infrastructure installation, the South El Monte Operations Center benefited from collaboration with the Joint Electric Truck Scaling Initiative (JETSI), an alliance of state and local agencies whose goal is to increase the number of zero emission heavy-duty trucks on the roads. The engineering and financial aspects are just two key components to ensuring that infrastructure capabilities keep pace as BEVs are added to a fleet.

In addition to the eCascadia deployment, Schneider evaluated the potential for other areas of their operations to introduce zero-tailpipe emission vehicles. As a result, Schneider replaced two diesel yard spotters with electric yard spotters at the Rancho Cucamonga, California, cross dock facility. The new vehicles run for a full 24-hour period before needing to be recharged and save an estimated 70,000 pounds of CO_2 each year.

Overall, incorporating these innovative vehicles into operations provides customers access to zero-tailpipe emission vehicles, which is critical as more customers are setting their own sustainability goals.

As part of this project, Schneider worked with customers to understand a variety of aspects of their BEV customer experience. This included dialogue with customers about driver reactions – which were reported as enthusiastic and highly favorable as they enjoyed the quieter ride, less vibration, throttle responsiveness, and use of the latest technology. In addition, Schneider sought to help their customers in measuring, reducing, and managing their Scope 3 emissions. For example, in 2023, Schneider's fleet of BEVs helped customers like PepsiCo and Goodyear realize their commitments to lowering emissions and building toward a more sustainable future. Schneider completed 779 BEV loads, traveling more than 31,000 zero emission miles and has been awarded the PepsiCo "Sustainability Asset Carrier of the Year" for the last three years.

Schneider's commitment to scaling the deployment of BEVs – driven by their shared corporate goals – provide an opportunity to meets today's freight demands and build an understanding of BEV use that can influence the sector's move toward decarbonization.

OUTCOME/ RESULT/ IMPACT

- Introduction of BEVs into the fleet using a phased approach provided opportunities to build experience and acceptance. Relative to a "jump into deep end" approach, a phased approach mitigated some risk as BEV use was scaled.
    - Collaborating during each phase, including working closely with OEM partners, created an operational environment that also rapidly grew their knowledge base to inform future scaling. Further, collaborative partners and alliances, focused on joint-funding opportunities and shared infrastructure development, allowed projects to advance at a pace that would not have been possible by a single entity.
- Supporting sustainability goals while meeting operational needs.
    - In 2023, the Schneider BEV fleet drove over 1.5 million "zero-emission miles," avoiding a projected 5 million pounds of CO2 emissions, relative to a comparable diesel-powered fleet. This is the equivalent of removing 507 gas-powered passenger cars from the road for a year – delivering air quality benefits today.

Call-Out Benefit

The drivers assigned to the BEVs love their in-cab experience (e.g., ease of acclimation, overall ride quality, reduced engine noise, and smooth handling) and these "driver wins" can aid in overall acceptance of BEVs.

"LEADING THE WAY": TRANSFERABLE LESSON LEARNED.

Building acceptance through collaboration – at all levels – is key to successfully incorporating BEVs into a depot and a company's operations.

Significantly increasing the use of BEVs, including building the infrastructure needed to charge battery electric trucks at the scale the transportation industry needs to meet its sustainability goals, is a notable challenge that can't be overcome by any one group. It will take creative thinking, collaborative action and building a vision in partnership with a wide variety of stakeholders.

Schneider has pointed out that drivers assigned to the BEVs love their in-cab experience. Throughout the BEV integration, drivers shared that it was easy to become comfortable using the vehicles and enjoy the BEVs ride quality, reduced engine noise and ease of steering. These "wins" for the driver can contribute to overall acceptance of BEVs.

CONCLUSION.

The pace of scaled deployment of alternatively-fueled vehicles can be accelerated through establishing key partnerships and a phased approach that applies lessons-learnd to each larger step. While the deployment

of BEVs can be a conversation of dollars and cents, driver enthusiasm for BEVs can play an important role in fleet business models that seek to attract and retain drivers today and into the future. Fleets that have begun to scale BEV deployment are seeing a variety of benefits – including reduced air emissions – that are helping them to meet their sustainability goals.

SmartWay *Profiles in Leadership*

Profiles in Leadership is SmartWay's newest recognition initiative. Beginning this year, EPA will recognize freight sustainability leadership actions of SmartWay Affiliates and eligible SmartWay Partners (Logistics companies, Air carriers, Barge carriers and Rail carriers). EPA developed this recognition concept after hearing that Affiliates and Partners would like to see greater opportunities for recognition of sector leadership. EPA SmartWay created this new type of recognition to provide additional opportunity for advancing freight transportation sustainability.

SmartWay defines leadership in this context as the ability to drive change, influence industry, lead freight efficiency performance, and sustain freight-related environmental excellence. *Profiles in Leadership* is an official SmartWay program acknowledgement of leadership demonstrated by investments that are strategic, financial, and innovative, which will yield future environmental and efficiency benefits.