



Fueling Fresno's Clean Transit Future

The transition to energy is accelerating, and hydrogen is emerging as a key player in decarbonizing transportation. In California's Central Valley, a region often underserved in the adoption of new technologies, H2B2 is leading the charge with its innovative approach to renewable hydrogen production and distribution. This case study examines how GTL Leasing's GTM-1500 hydrogen transport trailer is playing a crucial role in supporting H2B2's mission to fuel Fresno's growing fleet of fuel cell electric buses (FCEBs).

The Challenge

H2B2 is developing a 9MW renewable hydrogen production facility, with 3MW currently operational. Using biogas as a feedstock, their 1MW power unit allows producing 200-250kg of renewable hydrogen daily. This hydrogen is destined for Fresno Area Express (FAX), which currently operates two FCEB buses with ambitious plans for expansion. H2B2 needed a safe, reliable, and efficient way to store and dispense the produced hydrogen to FAX buses while a permanent dispensing infrastructure was being developed. The solution needed to accommodate high-pressure fills for continuous bus operation, offer sufficient storage capacity, and maintain a small footprint at their facility.

The Solution

GTL Leasing's GTM-1500 proved to be the ideal solution for H2B2's temporary dispensing and storage needs. The GTM-1500 offered several key advantages:

Enhanced Operational Resiliency: The GTM-1500 provided a crucial element of operational resiliency for H2B2's project. Its mobile nature and high storage capacity allowed for flexibility in handling potential production fluctuations and ensuring a continuous supply of hydrogen fuel for FAX's buses.

Safety and Efficiency: The GTM-1500 is engineered with advanced safety features, ensuring the secure storage and transport of hydrogen. Its high-pressure capabilities enabled efficient and rapid refueling, minimizing downtime and maximizing operational efficiency.

Compact Footprint and Easy Integration: The trailer's compact design minimized the required space at H2B2's facility, allowing for efficient utilization of available space. The GTM-1500 was easily integrated into H2B2's existing operations, ensuring a smooth and seamless transition to hydrogen fueling.



The Results

The GTM-1500 has been seamlessly integrated into H2B2's operations. FAX buses now regularly visit the H2B2 facility to refuel directly from the trailer. This setup has enabled H2B2 to:

- **Support FAX's FCEB Program:** H2B2 is playing a pivotal role in enabling FAX's transition to clean energy buses, directly contributing to improved air quality in the Central Valley.
- **Drive Down Costs:** By keeping hydrogen production and distribution local, H2B2 is helping to reduce the overall cost of hydrogen fuel, making it a more competitive alternative to traditional fuels.
- **Lower Carbon Intensity:** H2B2's use of biogas as a feedstock for power production, coupled with local hydrogen distribution, results in a significantly lower carbon intensity score for the hydrogen fuel.
- **Advance Clean Transportation in Underserved Communities:** H2B2's efforts are bringing the benefits of clean transportation to the Central Valley, a region that has historically lagged in adopting such technologies.

The collaboration between H2B2 and GTL Leasing demonstrates the power of partnerships in driving the adoption of clean hydrogen solutions. The GTM-1500 has provided a crucial link in the hydrogen supply chain, enabling H2B2 to support Fresno's transition to a cleaner, more sustainable transit system.

GET IN TOUCH

GTL Leasing

Phone: 888-376-9994
Email: info@gtlleasing.com

H2B2
Electrolysis Technologies

Phone: 559-790-1322
Email: info@h2b2.es