

Verdek's August 2019 Newsletter

Our Picks from the Top EV News of the Last Month

Electric School Buses Get Viability Boost in CA

North Carolina-based Thomas Built Buses Inc. has received two big certifications in California for its Type C Electric Buses, the **Safe-T-Liner C2 Jouley**, powered by Proterra electric vehicle technology. This is a big breakthrough for the company, whose buses offer a range of 120 miles on a 3-hour charge.



Replacing combustion engine school buses across the country would be a huge step forward for reducing the overall US carbon footprint, so we are hopeful to see more news and innovations that will increase the viability of these EVs.

Read more from Proterra, the EV technology behind these buses.



Harley's Motorcycle EV Specs Revealed

The details surrounding the long-awaited **Livewire** motorcycle EV from **Harley-Davidson** have long been speculative, but have now been officially announced to the public.

Harley has stated the 549-pound Livewire bike will get **146 miles of range** of city riding from its air-cooled 15.5 kilowatt-hour battery, whereas on the highway the range will drop to 70 miles. The motorcycle will retail for **\$29,799**, plus a delivery charge of \$355, for a total of \$30,154, which does not include a set-up fee.

The Livewire's engine delivers 105 horsepower (78 kw) and can go from 0-60 mph in 3.0 seconds. Its top speed is capped at 100 mph. The bike has broken Harley's record of lean angle, with this latest motorcycle being able to get to 45 degrees when

Read more from GreenCarReports.

Growth in N.A. RNG Reaches 150% Over Five Years

According to findings from the Coalition for Renewable Natural Gas (RNG Coalition), RNG production in North America has now reached over **100 operational facilities**. The majority of these facilities convert dairy farm cow waste into renewable energy.



The Coalition also found that RNG production saw

150% growth over the last five years from projects built over the last thirty-five years. These projects benefit local economies, providing revenue streams both for the host dairy farms and for local employers and investors.

Read more from <u>NGTNews</u>.



DOE Invests \$15M in Alt-Fuel Research & Infrastructure

In an effort to advance natural gas vehicle (NGV) technologies, the U.S. Department of Energy (DOE) has invested \$3.5M in select NGV research projects across the US.

On top of this, the DOE has also allocated \$10.2 million in advanced waste-to-energy and methane storage technology research which will further the NGV market. This \$10M investment is part of a larger \$50 million total allocated for the research of technologies for both trucks and their fuels.

The funded NGV projects are as follows, per <u>NGTNews</u>:

Natural Gas Vehicle Maintenance Cost Study

Clean Fuels Ohio, Columbus, Ohio NGV U.P.-T.I.M.E. Analysis: Updated Performance Tracking Integrating Maintenance Expenses Total Allocation: \$500,000

Smart Compressed Natural Gas Infrastructure Projects

Gas Technology Institute, Des Plaines, III. Smart CNG Station Deployment Total Allocation: \$1,999,789

Next Generation CNG Driver Information Systems

Gas Technology Institute, Des Plaines, III. Next-Generation NGV Driver Information System Total Allocation: \$1,000,000

Advanced Storage of Gaseous Fuels

University of Michigan, Ann Arbor, Mich. Optimal Adsorbents for Low-Cost Storage of Natural Gas: Computational Identification, Experimental Demonstration, and System-Level Projection Total Allocation: \$1,000,000

Advanced Storage of Gaseous Fuels

Northwestern University, Evanston, III. Theory-Guided Design and Discovery of Materials for Reversible Methane and Hydrogen Storage Total Allocation: \$1,000,000

Advanced Storage of Gaseous Fuels

University of Delaware, Newark, Del. Methane Storage with Porous Cage-Based Composite Materials Total Allocation: \$918,500

Advanced Storage of Gaseous Fuels

Montana State University, Bozeman, Mont. Heteroatom-Modified and Compacted Zeolite-Templated Carbons for Gas Storage Total Allocation: \$800,000

Advanced Storage of Gaseous Fuels

Penn State University, University Park, Pa. Developing New NG Super-Absorbent Polymer (NGSAP) for a Practical NG Storage System with Low Pressure, Ambient Temperature, and High Energy Density Total Allocation: \$895,065

Advanced Storage of Gaseous Fuels

University of South Florida, Tampa, Fla. Uniting Theory and Experiment to Deliver Flexible MOFs for Superior Methane (NG) Storage Total Allocation: \$800,000

Waste to Energy

North Carolina State, Raleigh, N.C. Renewable Natural Gas from Carbonaceous Wastes via Phase Transition CO2/O2 Sorbent Enhanced Chemical Looping Gasification Total Allocation: \$2,499,461

Waste to Energy

Washington State University, Pullman, Wash. Develop an Efficient and Cost-effective Novel Anaerobic Digestion System Producing High Purity Methane from Diverse Waste Biomass Total Allocation: \$2,234,051

Read more from <u>NGTNews</u>.

Until Next Month

Keep an eye out for next month's Verdek Newsletter, as we'll share another round of our top picks from the EV news cycle. As always, please follow us on <u>Facebook</u> and <u>Twitter</u> to get the latest news, insights, and shares from Verdek.

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