Amogy Presents World's First Ammonia-Powered, Zero-Emission Semi Truck

- The historic showcase presented a retrofitted 2018 Freightliner Cascadia powered by Amogy's ammonia-to-power system.
- Amogy impressively scaled its technology from 5kW to 300kW in under 18 months, demonstrating an ammonia-powered drone, tractor, and now Class 8 truck.
- After launching operations in Norway and announcing strategic partnerships in maritime and other heavy industries during 2022, Amogy continues its momentum to commercialization with this groundbreaking semi truck presentation.

Brooklyn, NY – January 17th, 2023 – Amogy Inc., a pioneer of emission-free, energy-dense ammonia power solutions, announced today the successful testing of the first-ever ammonia-powered, zero-emission semi truck. After integrating its technology into a 5 kW drone in July 2021 and 100kW John Deere tractor in May 2022, Amogy has quickly scaled its ammonia-to-power technology to 300 kW. Following an eight-minute-long fueling, the semi truck, having 900 kWh of total stored net electric energy, was tested for several hours on the campus of Stony Brook University. Later this month, the Amogy team will pursue a full-scale testing on a test track to showcase the truck's performance under various real-world operating conditions.

This latest successful presentation further proves ammonia to be a viable, sustainable solution for the otherwise hard to abate heavy-duty trucking industries, which account for 23% of the total

greenhouse gas emissions from transportation. Decarbonizing heavy-duty trucking has been challenging, with alternatives like battery power lacking the energy density needed to replace diesel for larger vehicles and long-distance routes with minimal downtimes. Amogy's ammonia-to-power system can enable the industry's transition away from diesel-powered engines and to alternative fuel-to-power technologies. Unlocking ammonia's potential, Amogy's proprietary technology enables the on-board cracking of ammonia into hydrogen, which is then sent directly into a fuel cell to power the vehicle. Liquid ammonia has an energy density that is approximately three times greater than compressed hydrogen and it requires significantly less energy, making it cost-effective to store and transport.

Ammonia presents a clear path to a zero-carbon fuel value chain across all heavy duty transportation sectors thanks to existing transportation and storage infrastructure. A global commodity, 200 million tons of ammonia are already produced and transported each year, making it an ideal and accessible alternative fuel.

"Beyond its incredible energy-density and liquid phase at an ambient temperature, ammonia is an optimal fuel to achieve rapid decarbonization of heavy transportations because it is available globally with existing infrastructure already in place," said Seonghoon Woo, Chief Executive Officer at Amogy. "This achievement not only showcases Amogy's technology as an accessible and scalable solution for trucking, it also highlights the capabilities and dedication of our outstanding team. First it was an ammonia-powered drone, then a tractor and now a truck. In the near future, we look forward to further scaling and tackling other hard-to-abate sectors, such as global shipping."

Following this successful freight truck testing, Amogy will continue to pursue strategic partnerships across the global shipping and transportation industries. This includes the company's 1 MW-scale ammonia-powered tugboat to be presented later in 2023, and other commercial deployments with partners including a recently-announced inland barge retrofit project with Southern Devall. With several successful technology demonstrations completed and a dual presence in the U.S. and in Europe, Amogy is making solid progress toward its goal of reducing more than 5 billion metric tons of CO2-eq emission by 2040.

Watch the video here

About Amogy

Amogy offers ammonia-based, emission-free, high energy-density power solutions to decarbonize transportation for a sustainable future. Founded in 2020 by four MIT PhD alumni with a shared vision, Amogy aims to enable the decarbonization of the heavy-duty transportation

sector, accelerating the global journey towards Net Zero 2050. The company's investors include Amazon's Climate Pledge Fund, AP Ventures, SK, Saudi Aramco and DCVC. To date, Amogy's scalable ammonia-powered, zero-emissions energy system has been demonstrated with success in a drone, heavy-duty tractor, and semi truck. More info at: www.amogy.co.