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Cummins Receives Award from the UK Government to Accelerate Hydrogen Engine Development for Medium and Heavy-Duty Engines

COLUMBUS, Ind.--(BUSINESS WIRE)-- Cummins Inc. (NYSE: CMI) announced today that its hydrogen-fueled internal combustion engine (H2-ICE) program is beginning development of a medium-duty 6.7-liter and a heavy-duty 15-liter engine.

“We’ve established significant goals as part of our PLANET 2050 sustainability strategy, including a target of zero emissions,” said Srikanth Padmanabhan, President, Engine Business, Cummins Inc. “Reducing well-to-wheels carbon emissions requires innovation of both energy sources and power solutions. While use cases for battery electric and fuel cell electric powertrains are promising, the pairing of green hydrogen in the proven technology of internal combustion engines, provides an important complement to future zero emissions solutions.”

Based on next generation platforms, the goal for the new hydrogen engines is to achieve *zero carbon emissions*, and enhanced power density and improved thermal efficiency.

“Cummins’ leadership and deep knowledge in the global natural gas vehicle market and gaseous-fueled technologies will enable us to develop these new hydrogen-fueled internal combustion engines for medium and heavy-duty markets,” added Padmanabhan. We are ready to accelerate the pace of our H2-ICE program to ensure Cummins continues to be a leader in this new, exciting technology.”

The development of the 6.7-liter hydrogen engine will focus on medium-duty truck, buses, and construction applications, such as excavators and wheel loaders. A new 15-liter platform offers the potential to bring hydrogen gas-fueled engine capability to heavy duty long-haul trucks.

Cummins global technical centers will work together to achieve commercial viability for the H2-ICE project on a global basis. Part of the development work to be undertaken at Cummins Darlington facility and will be supported by a funding award recently received from the UK Government, provided through the Advanced Propulsion Centre (APC), recognizing

the potential for Cummins H2-ICE to play a major role in de-carbonizing transport from 2025 onward.

Using proven and existing engine platforms for the H2-ICE program, also means that Cummins will be able to use its existing engine production facilities and service support network reducing costs and improving efficiency. In addition. the company can also reduce vehicle and equipment re-development timelines, as many existing driveline components can be retained when paired with the hydrogen-fueled engines.

Cummins adds another important resource in terms of integrating the hydrogen engine with the high-pressure gas vessels and supply lines it makes through its JV, NPROXX, which are installed on the vehicle or the equipment. Cummins pivotal role in expanding the hydrogen economy also extends to the design and manufacture of PEM fuel cells and renewable green hydrogen by proton exchange membrane (PEM) electrolyzers, uniquely linking a Cummins hydrogen ecosphere from production to vehicle power and fuel storage.

About the Advanced Propulsion Centre
The Advanced Propulsion Centre (APC) collaborates with UK government, the automotive industry and academia to accelerate the industrialization of technologies, supporting the transition to deliver net-zero emission vehicles. With its deep sector expertise and cutting-edge knowledge of new propulsion technologies, APC's role in building and advising project consortia helps projects start more quickly and deliver increased value. In the longer term, its work to drive innovation and encourage collaboration is building the foundations for a successful and sustainable UK automotive industry. For more information go to apcuk.co.uk or follow us @theapcuk on Twitter and Advanced Propulsion Centre UK on LinkedIn.

About Cummins Inc.
Cummins Inc., a global power leader, is a corporation of complementary business segments that design, manufacture, distribute and service a broad portfolio of power solutions. The company's products range from diesel, natural gas, electric and hybrid powertrains and powertrain-related components including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, automated transmissions, electric power generation systems, batteries, electrified power systems, hydrogen generation and fuel cell products. Headquartered in Columbus, Indiana (U.S.), since its founding in 1919, Cummins employs approximately 57,825 people committed to powering a more prosperous world through three global corporate responsibility priorities critical to healthy communities: education, environment and equality of opportunity. Cummins serves its customers online, through a network of company-owned and independent distributor locations, and through thousands of dealer locations worldwide and earned about $1.8 billion on sales of $19.8 billion in 2020. See how Cummins is powering a world that's always on by accessing news releases and more information at https://www.cummins.com/always-on.

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