



Energy Secretary Grant Shapps drives JCB's hydrogen powered backhoe loader

IMAGE SOURCE: JCB

Energy minister impressed with JCB's hydrogen engine development

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- Energy Secretary Grant Shapps impressed with JCB's hydrogen engine development
- JCB challenged to have hydrogen machines working on building sites and farms by next year
- Over 50 prototype engines produced, undergoing testing
- JCB successfully launched range of battery-electric compact machines
- Battery-electric technology unsuitable for heavier equipment in remote locations

- Energy Secretary drove hydrogen-powered JCB backhoe loader and refueled prototype
- JCB making decarbonization in construction and agriculture look easy
- JCB's zero-carbon hydrogen combustion engines can be brought to market quickly
- JCB emerging as a leader in zero-emission hydrogen technology
- JCB manufactures engines in the UK and India, producing around 200 per day at each plant

Energy Secretary Grant Shapps has challenged JCB to have its super-efficient hydrogen machines working on building sites and farms by next year – declaring himself “impressed” with the company’s early success in developing engines powered by the zero-carbon fuel.

The Secretary of State for Energy Security and Net Zero visited JCB Power Systems, Derbyshire, yesterday to see the progress a team of more than 150 engineers have made in developing hi-tech hydrogen combustion engines for use in construction and agricultural machinery. More than 50 prototype engines have been produced so far and several machines are currently undergoing testing.

Mr Shapps said: “This is a unique prospect that works well, and I’ve challenged JCB by the middle of next year - by 2024 - to be operating some of these on our roads and on construction sites. And JCB told me that it will be happy to try and achieve that objective, and good luck to them!”

Mr Shapps was hosted by JCB Chairman Lord Bamford and JCB CEO Graeme Macdonald. He was told how JCB had successfully launched a range of battery-electric compact machines, with more than 20,000 battery-electric machines already sold. He was shown how battery-electric technology was largely unsuitable for heavier equipment due to the higher energy demands, and the longer working hours of such machinery in remote locations where access to grid connections is limited.

At JCB’s Staffordshire proving ground, the Energy Secretary drove a hydrogen-powered JCB backhoe loader and tried his hand at the quick and easy task of refuelling the prototype. Mr Shapps added: “JCB operates in two fundamentally quite difficult areas to decarbonise: construction and agriculture. I have to say they’re making decarbonisation look easy, and I’ve been very impressed with what I’ve seen.”

Lord Bamford said: “It was a pleasure to show the Secretary of State the great progress JCB’s British engineers are making in developing a zero-carbon solution to power our future machines. They need to be powered by something other than fossil fuels in the future and super-efficient, affordable, high-tech hydrogen

combustion engines with zero emissions can be answer for the construction industry and agriculture. What's more, they can be brought to market quickly using our existing supply base."

JCB's emergence as a leader in zero-emission hydrogen technology comes as governments around the world unveil strategies to develop the infrastructure needed to support the use of hydrogen to drive down CO2 emissions. JCB has manufactured engines since 2004, producing around 200 per day at its UK plant in Derbyshire and 200 per day at its plant in Delhi, India.

Source: JCB Press Office