

1 November 2022

Hydrogen Future Industries plc
(“HFI” or the “Company”)

Hydrogen Production System Development Update

Hydrogen Future Industries plc (AQSE:HFI), a developer of proprietary wind and water-based green hydrogen production systems, announces the commencement of prototype testing of the wind element of the Company’s hydrogen production system 1 metre diameter prototype (the “Prototype”) in Montana, USA.

A key element of the Prototype is its proprietary wind turbine, which has been designed with notably distinct features which allow the turbines to be more efficient than current open rotor turbines due to modified aerodynamics, with cowling directing air flow across the rotor blades to create a multiple factor increase in wind speed. The cowling also directs the flow of wind out and away from the rear of the turbine, reducing the potential for still air to block the flow through the turbines.

The Directors believe the increased efficiency of the turbine could in turn increase the efficiency and ultimately lower the cost of hydrogen production.

The Prototype is being tested in an area selected for its consistent wind speeds and regulatory support for wind turbine development and wind farm placement. HFI has a local development facility where the turbines have been fabricated and mounted onto towers for testing in local wind speeds. The power output from the turbines will be compared to predicted results. The cowling and rotor blades are a product of aerodynamic development and have been 3D printed on site.

The first stage of the outdoor test programme - a 20-hour live test - has been successfully completed, confirming the aerodynamics align to the wind direction as planned, there is no distinguishing noise from the rotor blades, and there is no fouling of the blades with the cowling.



Image: HFI’s 1 metre diameter prototype wind energy hydrogen production system undergoing testing in Montana, USA (October 2022)

David Ormerod, Executive Director of HFI, commented:

“The testing HFI is undertaking in Montana will hopefully confirm the efficiency of the key elements of our wind energy system. Additionally, given the considerable efficiency gains we believe our turbine will offer compared to existing open rotor wind turbines in use today, the commercial applications for the HFI turbine may not be limited to hydrogen and could be applied to the wider wind energy sector.”

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Inside Information

This announcement contains inside information for the purposes of the UK Market Abuse Regulation and the Directors of the Company accept responsibility for the contents of this announcement.

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Certain statements made in this announcement are forward-looking statements. These forward-looking statements are not historical facts but rather are based on the Company's current expectations, estimates, and projections about its industry; its beliefs; and assumptions. Words such as 'anticipates,' 'expects,' 'intends,' 'plans,' 'believes,' 'seeks,' 'estimates,' and similar expressions are intended to identify forward-looking statements. These statements are not a guarantee of future performance and are subject to known and unknown risks, uncertainties, and other factors, some of which are beyond the Company's control, are difficult to predict, and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. The Company cautions security holders and prospective security holders not to place undue reliance on these forward-looking statements, which reflect the view of the Company only as of the date of this announcement. The forward-looking statements made in this announcement relate only to events as of the date on which the statements are made. The Company will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances, or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority.