

Title: Enabling H2 NRMM

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Contact: Sarah Batchelor / Dr Jonathan Scurlock; Transport Adviser / Chief Adviser, Renewable Energy and Climate Change

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Department for Transport consultation Enabling road use of hydrogen-powered non-road mobile machinery

The National Farmers' Union of England and Wales (NFU) would like to respond briefly to this consultation:

- **We support the proposed amendment to regulations, permitting hydrogen-powered agricultural motor vehicles and other types of NRMM capable of being driven on public roads. This should be extended to professional engine swaps or conversions in NRMM, in addition to new machinery, to ensure a greater range of flexible options for farmers.**
- **The proposed amendment to Construction and Use regulations should also allow for other possible future gaseous fuels, such as ammonia.**

The NFU represents over 45,000 farmer and grower businesses across England and Wales". In addition, we have 20,000 NFU Countryside members with an interest in farming and rural life.

Our trade association is the largest farming organisation in the UK, providing a strong and respected voice for the industry and employing hundreds of staff to support the needs of NFU members locally, nationally and internationally. We are engaged with government departments covering agriculture, rural affairs, environment, energy, climate change, employment, infrastructure and transport issues, directing policy into real economic opportunities for rural diversification and job creation. The NFU champions British agriculture and horticulture, to campaign for a stable and sustainable future for our farmers and growers.

With 75 per cent of national land area in the agricultural sector, NFU members have a significant interest in land-based renewable energy production, where they can benefit directly as energy producers themselves or as hosts for energy plant developed by others.

Background and general comments

Regulation 94 of the Road Vehicles (Construction and Use) Regulations 1986 specifies safety requirements for the use of gas propulsion systems in vehicles. In 2017, this regulation was amended to permit most road vehicles to be powered by hydrogen, provided they met Type Approval. However, the Road Vehicles (Approval) Regulations 2009 exclude non-road mobile machinery (NRMM). The Government proposes a further amendment to regulations, extending them to cover hydrogen-powered agricultural motor vehicles and other types of NRMM capable of being driven on public roads.

In our response to the government Call for Evidence on NRMM which closed on 26 March 2024, the NFU wrote:

- JCB's hydrogen combustion technology appears promising, if they can prove its safety in fuel distribution and handling.
- The accessibility of...alternative fuels including availability and distribution...may pose other challenges such as fuel handling safety and planning / landscape issues. Farmers need to understand more about the potential distribution methods and infrastructure required for alternative fuel sources such as hydrogen (e.g. tankers, pipelines).
- Some large specialist machinery (e.g. sugar beet and pea harvesters) may be arguably better suited to retrofitting with low-carbon engine technology rather than complete replacement.

The NFU is also participating in the ongoing DESNZ task-and-finish group on hydrogen internal combustion engines for NRMM. Our strong preference is that hydrogen should pose no greater risk than the other agricultural machinery fuels currently available in its use, storage and distribution.

Responses to consultation questions

Do you agree with enabling the road use of hydrogen-powered NRMM and agricultural vehicles?

Yes, to overcome their omission from Regulation 94 of C&U requirements.

Do you agree in limiting the amendment to allow only new machinery powered by hydrogen? Should we consider options to enable the safe retrofit of NRMM and agricultural vehicles to operate on hydrogen in future?

The NFU disagrees with limiting the amendment to only new machinery. Options for professional engine retrofits or conversions by approved providers should be permitted, while disallowing 'amateur' conversions on safety grounds.

Do you agree with our approach to ensuring hydrogen safety is sufficiently covered in this amendment?

Yes, as part of the wider safety case for distributing, handling and using hydrogen in agricultural machinery.

Do you agree with the proposed categories of vehicles (as defined in C&U) which will be the subject of the amendment?

Yes.

Are there other gaseous fuels that we should be seeking to enable road use of for NRMM and agricultural vehicles?

Yes, ammonia and other alternative fuel options should be in scope, in order not to restrict potential future market developments.