

# STEYR showcases future farming technology with its STEYR Konzept - a hybrid powered concept tractor

STEYR has undertaken a study which focuses on zero-emission powertrains, innovative drive solutions and a futuristic operator environment.

London, November 11, 2019

Combining innovative technologies in a unique, sustainable and potentially zero emission package, STEYR, the premium short-liner agricultural brand of CNH Industrial N.V. (NYSE:CNHI / MI:CNHI), in partnership with sister powertrain brand FPT Industrial, has created the STEYR Konzept, which encapsulates a future vision for agricultural machinery.

This concept tractor, designed by CNH Industrial's Design Center, is centered around a modular hybrid electric drive, comprising a highly efficient diesel engine, a generator and five electric motors, which are individually controlled. This innovative vehicle architecture offers a range of benefits, including enhanced operational flexibility and comfort.

### **Advanced STEYR Hybrid Technology**

The STEYR Konzept's electric motors are networked to ensure power is directed exactly where needed, and an e-torque boost, fed from a central battery, supplies additional energy when operating at peak power. This system results in highly efficient, electric continuously variable drive, with fewer moving parts – as the mechanical transmission and hydraulic components have been eliminated – to deliver optimal energy flow with reduced power losses. For even more efficient operation, energy can also be recovered and stored when travelling downhill. When required, the concept vehicle can easily be charged via a standard charging socket. Tractor hydraulics as well as the PTO (power take off, used for powering mounted implements) are electrically driven. Electrified implements can also be powered by either a high voltage (700V) or low voltage (48V) connector.

Four independent electric wheel hub motors are supplied with the precise amount of energy from the battery or generator according to their real-time requirements which delivers outstanding traction and precise steering.



#### **Zero-emission operation**

In pure electric mode, the STEYR Konzept enables zero-emission operation – in terms of both exhaust gas and noise, making it ideal for use in municipal environments as well as when working in proximity to livestock or in confined spaces on the farm.

#### **Unsurpassed handling**

The concept tractor's superior handling comes courtesy of immediately available torque, which also ensures near-instantaneous vehicle response, perfect when working in variable conditions, such as when baling or conducting road transport. The use of wheel hub motors lowers the vehicle's overall center of gravity, improving stability as well as maneuverability thanks to individual wheel torque deployment and four wheel steering. The operator environment is enhanced thanks to individual wheel suspension for a smoother ride, and large glazed windows with integrated cameras ensure better visibility and safety.

## A mobile digital farm office

The STEYR Konzept features innovative precision farming technologies: a drone equipped with crop sensors flies ahead of the tractor during field work, transmitting real-time data back to the cab, meaning operating parameters can be modified based on actual field conditions.

A mobile, digital farm office empowers operators to undertake farm management directly from the cab thanks to an integrated display on the right-hand window. A head-up display on the windscreen projects all key vehicle parameters for instant viewing.

This study lays the foundations for the future of tractor design, thanks to a fresh look at the technical constraints through the three lenses of efficiency, sustainability and comfort.



CNH Industrial N.V. (NYSE: CNHI /MI: CNHI) is a global leader in the capital goods sector with established industrial experience, a wide range of products and a worldwide presence. Each of the individual brands belonging to the Company is a major international force in its specific industrial sector: Case IH, New Holland Agriculture and STEYR for tractors and agricultural machinery; Case and New Holland Construction for earth moving equipment; Iveco for commercial vehicles; Iveco Bus and Heuliez Bus for buses and coaches; Iveco Astra for quarry and construction vehicles; Magirus for firefighting vehicles; Iveco Defence Vehicles for defence and civil protection; and FPT Industrial for engines and transmissions. More information can be found on the corporate website: <a href="https://www.cnhindustrial.com">www.cnhindustrial.com</a>

# Sign up for corporate news alerts from the CNH Industrial Newsroom:

bit.ly/media-cnhindustrial-subscribe

#### Media contacts:

Laura Overall
Corporate Communications Manager
CNH Industrial
Tel. +44 (0)2077 660 338

101. 144 (0)2011 000 000

E-mail: mediarelations@cnhind.com