



HYDROGEN FUEL CELL SOLUTIONS FROM POWERCELL SWEDEN

Mission Innovation Hydrogen Fuel Cell Off-Road Equipment and Vehicles Workshop, 2021-09-23



Global Footprint and strong partners



Leading Fuel Cell technology built on
25 years of R&D & IP

Spin-out from the Volvo Group in 2009

Listed on NASDAQ since 2014,
with more than 38,000 shareholders

HQ in Sweden with global presence

Strategic partners to drive business



BOSCH

HITACHI

ABB

SIEMENS
energy



Statkraft

Leading technology with strong strategic partners



World leading stack technology developed in cooperation with major automotive OEMs enables smart system solutions.



Leveraging the partnership with Robert Bosch GmbH on the on-road market and the joint industrialization to achieve cost reductions through large-scale production.



Compact and robust 100 kW system with vertical and horizontal positioning facilitates integrating systems into vehicles. Already used in several off-road customer projects



Highly skilled engineers and advance test capabilities help keep PowerCell at the forefront of technology and innovation and ability to support our customers

We support our customers through the entire transition from ICE to hydrogen electrification!

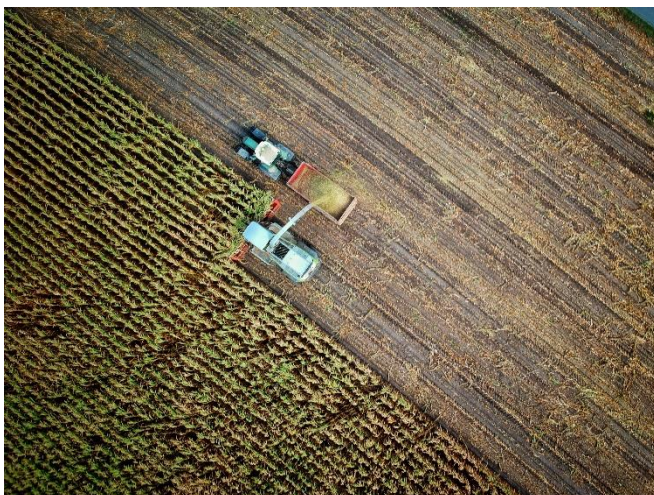
OUR
CUSTOMER
APPROACH

MINIMIZE
TECHNICAL
RISK

MINIMIZE
R&D
INVESTMENT

MINIMIZE
TIME TO
MARKET

OUR
CURRENT
OEM
PROJECTS



Opportunities & Hurdles

Opportunities:

- Stop legislating diesel emissions => legislate CO₂ emissions instead
- Carbon labelling for agricultural products is gaining importance
- CO₂ free zones in urban areas will impact construction work sites
- Hydrogen electric vs. battery electric for off-road equipment – range, downtime, electricity infrastructure
- Onsite hydrogen production resolves issues related to high energy consumption and transportation costs in mining
- Open-pit mining machines are electrified which facilitates the transition to hydrogen electric machines
- Broad industry cooperation is needed for each Off-Road market segment

Hurdles:

- General lack of broad field experience with hydrogen electric in Off-Road segments
- Uncertainty of hydrogen future deters OEMs from making investments
- Logistical challenges and availability of hydrogen infrastructure

Thank you for listening!

For further information please contact:

Johan Burgren
Business Manager Off-Road
johan.burgren@powercell.se
+46 739 103769

Johan Beyer
Business Manager North America
johan.beyer@powercell.se
+46 708 198039



