## Clean Air Power taking MotoHawk to production

Clean Air Power has developed technology to convert existing heavy-duty diesel engines into Dual-Fuel<sup>TM</sup> for the purposes of reducing CO<sub>2</sub> tailpipe emissions and operators' fuel costs. This technology allows an engine to be fuelled by natural gas and diesel simultaneously. Volvo plans to launch "methane diesel" trucks incorporating Clean Air Power's technology. Fleet trials are underway in the UK and Sweden.

Dual-Fuel<sup>TM</sup> is fitted onto a standard diesel engine that operates virtually unchanged, except for the addition of gas injectors and a MotoHawk control system. The MotoHawk system controls the delivery of both fuels: natural gas and diesel. Whilst retaining fuel efficiency and full power, CO<sub>2</sub> emissions can be reduced by up to 25% as



natural gas replaces 75%-90% of the diesel.

Clean Air Power has been using MotoHawk for the past three years of development. One of the main reasons for choosing MotoHawk as a prototyping system was that it was based on production hardware and easy to migrate to volume production without the need for an additional design cycle.

During the development of Clean Air Power's production solution, Automotive Mechatronics was hired as an independent assessor to test the safety critical Dual-Fuel<sup>TM</sup> engine control algorithms. This formed part of Clean Air Power's software



process improvement and capability determination (SPICE) verification design cycle.

Clean Air Power has pioneered the move towards using natural gas to power vehicles by developing Dual-Fuel<sup>TM</sup> technologies that guarantee diesel engine performance, with significant cost savings and low carbon emissions. Clean Air Power is an active technology developer with 63 patents held and pending. Clean Air Power operates on a global scale, with customers in the US, UK and most recently Australia. www.cleanairpower.com

Automotive Mechatronics provides products and services for the control and calibration of low carbon and hybrid electric vehicles. Automotive Mechatronics is a system integrator for MotoHawk providing technical support within Europe. www.automotivemechatronics.com

