



REWARD

REal World Advanced Technologies for Diesel Engines

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Project partners:

- 1 - AVL - AVL List GmbH - AT
- 2 - REN - Renault SAS - FR
- 3 - VCC - Volvo Car Corporation - SE
- 4 - CRF - CRF SCpA - IT
- 5 - CNRIM - Istituto Motori – Consiglio Nazionale delle Ricerche (CNR) - IT
- 6 - JM - Johnson Matthey Plc - UK
- 7 - RIC - Ricardo Plc - UK
- 8 - SCF - Schaeffler AG - DE
- 9 - LMM - Le Moteur Moderne - FR
- 10 - DELPHI - Delphi Automotive Systems Luxembourg S.A. - LU
- 11 - UNR - Uniresearch BV - NL
- 12 - IFPEN - IFP Energies Nouvelles - FR
- 13 - VIF - Virtual Vehicle Research Center - AT
- 14 - CTH - Chalmers Tekniska Högskola - SE
- 15 - CTU - Czech Technical University - CZ
- 16 - UPVLC - Universitat Politècnica de València – Motores Termicos - ES

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Publishable Executive Summary

The base engine which will be used for the development of a new low NOx combustion concept has been laid out and specified by RENAULT and AVL. This engine, spare parts and hardware variants for the development work have been provided and procured by RENAULT who sent all this hardware to AVL in Feb 2016. The preparation of the engine for the work on the test bed has started.

The prototype engine is based on RENAULT's Energy dCi 130 (1,6L R9M gen1), equipped with a Bosch 1600 bar injection system, variable geometry turbo compressor, steel pistons and LP EGR.

Renault Code	RENAULT R9M
Max. Power	96 kW
Max. Torque	320 Nm
Cylinders	L4
Displacement	1598 cm ³
Emission standard	Euro 6a
DPF	Y
Charging system	Single stage VNT