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D3.8 Confidential (CO) Report on efficiency optimization potential for future engines

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	and alternative renewable fuel technologies for road transport
Project acronym:	REDIFUEL
Project title:	<u>R</u> obust and <u>Efficient processes and technologies for Drop In</u>
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Project website:	www.redifuel.eu
Technical coordination	FEV (DE) (<u>www.fev.com</u>)
Project management	Uniresearch (NL) (<u>http://www.uniresearch.com</u>)



Executive Summary

The joint project "Robust and Efficient Processes and Technologies for Drop-In Renewable Fuels for Road Transport" (REDIFUEL) aims to produce an ultimate renewable drop-in biofuel, which is compliant with EN590 norms in a sustainable manner. In this project, a holistic fuel characterization is planned to assess the fuel characteristics and engine performance of this new paraffinic biofuel, consisting of about 30 vol% bio-alcohols. This report demonstrates the potential of REDIFUEL mixture with either B0 diesel or UCOME used for next generation heavy-duty CI engines. The fuel mixtures are highlighted by increasing engine performance together with a reduction potential in pollutant and soot emissions simultaneously for different future engine calibration scenarios.



Acknowledgement

H2020-LC-SC3-RES-21-2018-DEVELOPMENT OF NEXT GENERATION BIOFUELS AND ALTERNATIVE RENEWABLE FUEL TECHNOLOGIES FOR ROAD TRANSPORT

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Project partners:

- 1 FEV FEV EUROPE GMBH DE
- 2 MPI MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTENEV DE
- 3 CSIC AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS ES
- 4 VTT Teknologian tutkimuskeskus VTT Oy FI
- 5 RWTH RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN DE
- 6 OWI OWI Science for Fuels gGmbH DE
- 7 VUB VRIJE UNIVERSITEIT BRUSSEL- BE
- 8 NESTE NESTE OYJ FI
- 9 MOL MOL HUNGARIAN OIL AND GAS PLC HU
- 10 INER INERATEC GMBH DE
- 11 T4F TEC4FUELS DE
- 12 UNR UNIRESEARCH BV NL

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