



The logo for NEN (Dutch Normalization Association) consists of the letters 'NEN' in a bold, blue, sans-serif font, centered within a light blue rectangular box.

PRESS RELEASE

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Green power for tractors and other agricultural machinery: Publication of a new specification for plant oil fuel

CEN, the European Standardization Committee, has published a first fuel specification for vegetable oil to be used as an alternative diesel fuel for tractors and other agricultural machinery. The final text of this new specification was presented today in presence of the European Commission at the final event of the 2nd VegOil project.

The new specification (CWA 16379) represents the results of this project, which has received funding from the European Union Seventh Framework Programme for research, technological development and demonstration activities (2007-13) under the Grant Agreement n°TREN/FP7/EN/219004/ "Demonstration of 2nd Generation Vegetable Oil Fuels in Advanced Engines - 2nd VegOil". The project partners undertook practical research on the use of so-called "second generation" vegetable oil-based fuels in the farming sector, with trials carried out in four European countries.

Worldwide, energy policy makers are increasingly keen to move away from petroleum-based fuels to more diverse and renewable sources of energy for reasons of environmental protection, energy security and continued economic development. One of these fuels is transesterified vegetable oil, also known as FAME (Fatty acid methyl esters). This "biodiesel" technology has led to a number of specification standards, including the European Standard EN14214.

Pure vegetable oil use as diesel engine fuel can be ecologically and economically beneficial. The production involves few process steps and is economically possible with small units. The production process requires only low energy input, because no thermal or chemical process steps are involved. It can be implemented in decentralised small units. The non-toxicity and the low flammability are advantages from a logistics point of view

The 2ndVegOil project was devoted to optimizing base product and pressing process, without additional chemical plant process steps. Several tractors have been successfully run on the resulting oil over an extended period of time, providing valuable data for developing the new specification (CWA 16379).

The aim of the new specification is to support vehicle warranties, easier engine adaptation and improved plant oil treatment. It was developed in the framework of a CEN workshop. Apart from 2ndVegOil partners other organizations with relevant experience took part in the discussions. The concept of pressed rape seed oil (as laid down in the German standard DIN V 51605) has been developed into a specification that is feedstock independent. CWA 16379 specifies those properties of pure plant oil (PPO) that are necessary to achieve smooth deployment of this fuel in diesel engines, compatible for PPO combustion. Two fuel classes have been defined, for using in diesel engines with or without a catalyst or filter to treat exhaust gases.

With this document harmonisation on plant oil fuels across Europe and globally is initiated. CWA 16379 is usable on a voluntary basis for engine clearance, fuel acceptance and where

necessary fuelling requirements, supporting both local regulations and international trade. In the longer term, further work in this area, including moves towards a more formal standard, will depend on whether pure plant oil based fuel and the adapted engines become widely available.

About the 2ndVegOil project

The 2ndVegOil project is a joint RTD and demonstration project of 10 organisations including industry, SME, a university, an energy agency, two agricultural organisations and a standardisation body, co-financed under the European Commission's 7th Framework Programme. It has run for 3 years from August 2008 to December 2011 and has pushed the former developments of neat vegetable oil powered engines to be ready for coming exhaust regulations (EU stage 4 for off-road vehicles respectively EURO 6 for road vehicles). Introduction of 2nd generation vegetable oil and advanced engines into the agricultural markets will set standards for other branches and vehicles.

For more information see: <http://2ndvegoil.eu/>

About CEN

The European Committee for Standardization (CEN) is a business catalyst in Europe, removing trade barriers for European stakeholders such as industry, public administration, service providers, consumers and other stakeholders. Its mission is to foster the European economy in global trading, the welfare of European citizens, and the environment. Through its services, CEN provides a platform for the development of European Standards and other specifications.

CEN's 32* national members work together, to develop voluntary European standards (ENs) in various sectors to build a European internal market for goods and services and to position Europe in the global economy. By supporting research, and helping disseminate innovation, standards are a powerful tool for economic growth. More than 60,000 technical experts as well as business federations, consumer and other societal interest organizations are involved in the CEN network that reaches over [500] million people. For further information, please see: www.cen.eu

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* including Turkey (as from 1 January 2012)

About NEN

NEN is the Standardization Institute of the Netherlands (Nederlands Normalisatie-instituut). Based in Delft, it is one of 32* national standards bodies that are members of CEN. NEN has led the work package on standardization in the 2ndVegOil project. NEN also supports many CEN Technical Committees, for instance on (bio)fuels, solid biomass, sustainability criteria and bio-based products.

For more information see www.nen.nl or contact energy@nen.nl

CEN Workshop 56 - Vegetable liquid fuel from virgin (non-)food oils for use in heavy duty diesel engines (VegOil)

<http://www.cen.eu/cen/Sectors/TechnicalCommitteesWorkshops/Workshops/Pages/vegoil.aspx>