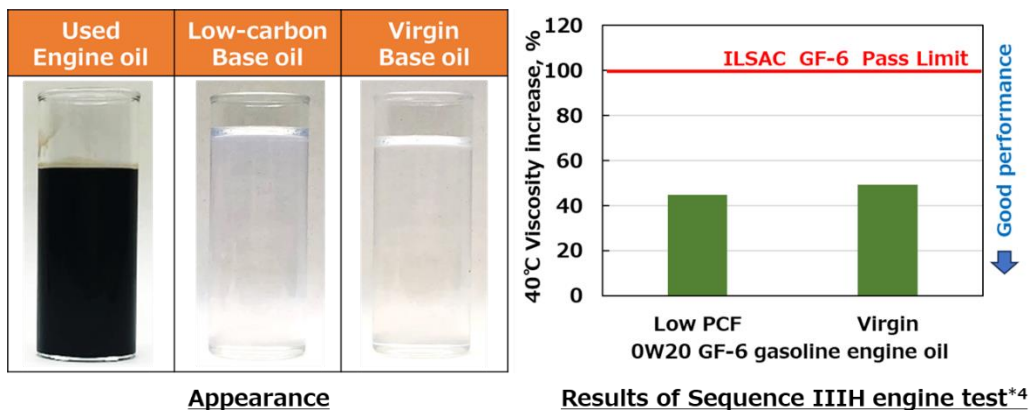


Establishment of a Production Process for Low-Carbon Lubricant Base Oil Contributes to the Realization of a Circular Society

~Success in Producing Next-Generation Base Oil Supporting a Sustainable Future~

ENEOS Corporation (Representative Director, President: Yamaguchi Atsuji; “ENEOS”) is pleased to announce the successful production of low-carbon base oil^{*1} as part of a demonstration project for the social implementation of lubricant base oil regeneration technology utilizing used lubricant oil. In its technological study, it utilized the used engine oil collected from the market as raw material, with the cooperation of Toyota Motor Corporation.



In the Sequence IIIH test^{*2}, an international index for high-temperature oxidation stability, the gasoline engine oil formulated with low-carbon base oil has been confirmed to have high-temperature oxidation stability equivalent to that of conventional gasoline engine oil blended with base oil derived from crude oil.

This technological study is part of the verification theme “Establishment of a process for recycling waste lubricant oil into lubricant base oil,” which was selected under the Ministry of the Environment’s “FY2022 Demonstration Project for a Plastic Resource Circulation System toward a Decarbonized Society” program^{*3}. Besides utilizing existing domestic petroleum refining technologies, ENEOS is also exploring the possibility of technical partnerships with overseas companies.

ENEOS, in line with its Group's Long-Term Vision, takes on the challenge of achieving both a stable supply of energy and materials and the realization of a carbon-neutral society, aiming to contribute toward a decarbonized and recycling-oriented society. As part of this effort, ENEOS is developing products that reduce CO₂ emissions throughout their product life cycle in its lubricant business. Moving forward, ENEOS will work towards the early establishment of a production system for low-carbon base oils using used lubricants as raw materials. This will involve scaling up the pilot project, considering the effective use of existing facilities at refineries and plants, and actively engaging in dialogues with stakeholders involved in these projects.

*1 Base oil with reduced CO₂ emissions.

*2 A high-temperature oxidation stability test method specified in the GF-6 gasoline engine oil standard established by the International Lubricants Standardization and Approval Committee (ILSAC). It evaluates the high-temperature oxidation stability of engine oil based on the increase in viscosity and other factors after being subjected to a driving pattern that simulates high-temperature operation.

*3 Projects for fiscal years 2022 to 2023.

News release dated August 5, 2022: [Establishment of a Process for Regenerating Used Lubricant Oil into Lubricant Base Oil](#) (in Japanese)

*4 Conducted by a third-party certification body.