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CURRENT COLLECTION AND POTENTIAL COLLECTION OF USED COOKING OIL FOR BIOFUEL PRODUCTION

Used cooking oil (UCO), a kind of waste oil, can be a low-cost feedstock and can be used to produce different kinds of biofuel for the transportation sector. Indeed, several Asian countries already have biofuel programs that include UCO, but in Indonesia, UCO use is not incentivized under the biofuel program. At the same time, demand for UCO is expected to increase in regions with ambitious low-carbon biofuel policies, such as the European Union and California, in the United States.

As part of a wide-ranging February 2022 ICCT study, we considered the current uses and potential for UCO biodiesel production in Indonesia. In all, we assessed how much UCO is currently collected and how much potential there is to collect UCO from the six Asian countries that export the most of it: China, India, Indonesia, Japan, Malaysia, and the Republic of Korea.

KEY FINDINGS FOR INDONESIA

- » Potential: Indonesia could collect 715 kilotonnes of UCO annually, which could yield 651 kilotonnes of biodiesel or 608 kilotonnes of renewable diesel.
- » Current collection: About 20%-40% of total potential.
- » Exports: These continue to increase and grew from only 17 kilotonnes in 2012 to 220 kilotonnes in 2020.
- » Imports: In 2019, Indonesia imported around 9 kilotonnes, most of this from China.
- » Gutter oil: UCO re-used as cooking oil is called gutter oil and this practice negatively affects human health. There is very little information on how much UCO turns into gutter oil.
- » Biofuel production: Likely less than 1 kilotonne of UCO is converted to biofuel each year, far below the amount produced in China, the Republic of Korea, or India, for example.
- » Foreign demand: UCO needed for biofuel could exceed 4,000 kilotonnes in the European Union and United States alone. China, India, and the Republic of Korea, also incentivize UCO biofuel.



We recommend that Indonesian policymakers implement a program that aims to eliminate gutter oil by increasing UCO collection and using it for the domestic biofuel program. Policymakers in China and India have already done this.

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