



**Voluntary Report** – Voluntary - Public Distribution **Date:** April 06, 2022

**Report Number:** TH2022-0023

**Report Name:** Updated Biofuel Situation in 2022

Country: Thailand

Post: Bangkok

**Report Category:** Biofuels

Prepared By: Ponnarong Prasertsri, Agricultural Specialist

Approved By: Kelly Stange

## **Report Highlights:**

The government reduced the biodiesel mandatory blend rate from 10 percent to 7 percent in 2022. However, the current blend rates during February 5 – March 31, 2022, were set in range with a minimum of B5 for diesel fuel to help curb retail prices of diesels.

## **Executive Summary**

The upward price pressure on palm oil prices and the surge in crude oil prices in October 2021 to three-year record \$81.4/barrel prompted the government to reduce the B10 mandatory blend rate of biodiesel in diesel fuel to curb retail prices of diesel at 30 baht/liter (\$3.48/gallon). The new mandatory will have multiple blend rates of B7 and B20 (specifically for large trucks) between 2022 and 2023. Then, B7 will be the only mandatory blend rate for diesel fuel from 2024 onward. However, the government set the range of the biodiesel blend rate at 5-7 percent for B7, 5-10 percent for regular high-speed diesel, and 5-20 percent for B20 during February 5 -March 31, 2022. The minimum blend rate of biodiesel could be reduced to 3 percent, depending on global palm oil prices and local supplies of palm oil available for cooking oil purpose which is the main priority of the government.

## Biodiesel mandatory blend rates vulnerable since late 2021

The government began to increase the mandatory blend rate of biodiesel to B10 (a 10% mixture of pure biodiesel (B100) in diesel) in October 2020 after introducing it in 2019 to absorb excess supplies of oil palm to help farmers in the southern region (Table 1). At the same time, the government had B7 and B20 available as voluntary blend rates for older vehicles that were not compatible with B10.

Farm-gate prices of oil palm (fresh fruit bunches) increased significantly in October 2020, up 85 percent from the same period last year after the mandatory B10 was in place (Figure 1). Prices of oil palm continued the upward trend in 2021, driven by tighter supplies of oil palm in Malaysia and Indonesia which accounted for around 90 percent of global supplies. Moreover, current trade disruption on sunflower oil from the Russian invasion of Ukraine put more upward pressure on palm oil prices as India reportedly sourced more palm oil from Malaysia and Indonesia to secure local supplies of cooking oil while Ukrainian sunflower oil trade was at risk.

The upward price pressure on palm oil prices, as well as the surge in crude oil prices in October 2021 to three-year record \$81.4/barrel (Figure 2), prompted the government to reconsider the mandatory blend rate to curb retail prices of diesel at 30 baht/liter (\$3.48/gallon). Initially, the government announced on October 4, 2021, to reduce the mandatory blend rate of biodiesel to B6 and to terminate the sales of B7, B10, and B20 between October 11 - 31, 2021. However, the government had to postpone the B6 mandatory blend rate on October 20, 2021, due to the complaints from oil palm farmers.

Table 1: Timeline of Biodiesel's Mandatory Blend Rates in Thailand

Date	Mandatory Blend Rates				
June 2007	B2 and voluntary use of B5				
June 2010	B3 and voluntary use of B5				
March 2011	B2 and voluntary use of B5				
May 2011	B3-B5				
July 2011	B4				
January 2012	B5				
July 19, 2012	B3.5				
November 1, 2012	B5				
January 1, 2014	В7				
February 17, 2014	B3.5				
May 14, 2014	В7				
January 22, 2015	B3.5				
April 17, 2015	В7				
July 25, 2016	B5				
August 25, 2016	В3				
November 16, 2016	B5				
May 8, 2017	B6.5-7.0				
November 8, 2018	B6.6-7.0				
October 1, 2020	B10 and voluntary use of B7 and B20				
October 4, 2021	B6				
November 1, 2021	B10 and voluntary use of B7 and B20				
January 31, 2022	B7 and B20 during 2022-23 and B7 from 2024 onward				

Figure 1: Farm-gate Prices of Oil palm (Fresh Fruit Bunches)

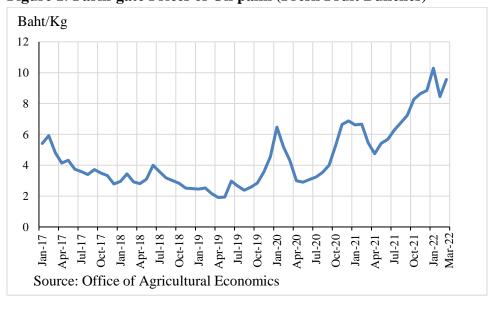
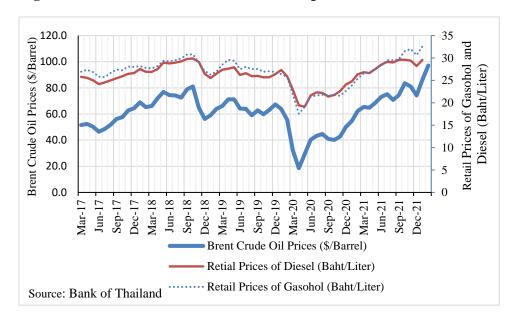


Figure 2: Brent Crude Oil Prices and Fuel prices in Thailand



The government decided on January 31, 2022, the new mandatory blend rates during the current critical fuel energy situation to have multiple blend rates of B7 and B20 (specifically for large trucks) between 2022 and 2023. Then, B7 will be the only mandatory blend rate for diesel from 2024 onward. However, the government set the range of the biodiesel blend rate at 5-7 percent for B7, 5-10 percent for regular diesel, and 5-20 percent for B20 during February 5 -March 31, 2022. The minimum blend rate of biodiesel could be reduced to 3 percent, depending on global palm oil prices and local supplies of palm oil available for cooking oil purpose which is the main priority of the government. In addition to the reduced mandatory blend rates, the government cut the excise tax collected from biodiesel by half (Table 2). Nevertheless, the government's subsidy on retail prices of biodiesel through state Oil Fund was still high at 4 baht per liter (45 U.S. cent/gallon) in March 2022, which doubled from around 2 baht per liter (23 U.S. cent/gallon) in October 2021 due to continued surge in global crude oil prices. Retail prices of biodiesel should have increased to over 50 baht per liter (\$5.65/gallon) if the government did not have measures to reduce the mandatory blend rates and excise tax, and to increase the price subsidies.

**Table 2: Price Structure of B7 Diesel (end of October)** 

	2018	2019	2020	2021	2022 (Mar 18)
Ex-Refinery Prices	20.2470	15.5522	10.1720	21.6626	27.8451
Excise Tax	5.9800	5.9900	5.9900	5.9900	3.2000
Municipal Tax	0.5980	0.5990	0.5990	0.5990	0.3200
Oil Fund Fee	-0.6000	0.0500	1.0000	-1.9900	-4.0000
Conservation Fund Fee	0.1000	0.1000	0.1000	0.1000	0.0050
Wholesale Prices	26.3250	22.2912	17.8610	26.3616	27.3701
Value Added Tax	1.8428	1.5604	1.2503	1.8453	1.9159
Wholesale Prices + VAT	28.1678	23.8515	19.1113	28.2069	29.2860
Marketing Margin	1.6096	1.9051	2.2231	1.3860	0.6112
Value Added Tax	0.1127	0.1334	0.1556	0.0970	0.0428
<b>Retail Prices</b>	29.8901	25.8900	21.4900	29.6900	29.9400

Source: Energy Planning and Policy Office, Ministry of Energy

Gasohol prices are also under upward pressure, mainly driven by global crude oil prices. However, the government maintained the multiple blend rates for gasohol due to anticipated recover in supplies of molasses, which are main feed stocks of gasohol. Molasses supplies are expected to increase to normal supplies of 3.2 million metric tons in 2022 due to the recovery in MY2021/22 sugarcane production. Nevertheless, the government still postponed the plant to termination of E10 and encourage the use of E20 for another two years or until the end of 2022, when the new national energy plan will be finalized.

End of report.

## Attachments: No Attachments.