Neste Oil Application

Renewable Diesel from Southeast Asian Fish Oil

Response to Comments

Comment: The use of fish as a transportation fuel feedstock will place additional pressure on our oceans. This is an unsustainable strategy that should not be pursued in order to meet the fuel carbon intensity reduction goals of the LCFS. Marine fisheries are collapsing worldwide and the proposed pathway will exacerbate this problem. No marine animal should be harvested for fuel.

Comment: Fish oil is the most valuable source of Omega 3 fatty acids, an important nutrient for both humans and the creatures in the food chains that depend upon the fish.

Comment: The emissions associated with the production of the renewable diesel in Singapore and the transport of the finished fuel to California were not considered in the analysis.

Response: The fish oil Neste uses as a renewable diesel feedstock is a low-valued byproduct of the Vietnamese fish fillet industry. The fish processed by this industry are harvested for their fillets rather than for their oil. In a similar manner, no segment of the livestock industry exists to supply the market with byproduct tallow. Much of the oil Neste obtains from rendering facilities in Vietnam is from a species (*Pangasius*) that yields non-commercial quantities of Omega-3 oils. If not used as a renewable diesel feedstock, the byproduct oil and meal from the fillet industry are used as livestock feed.

All LCFS fuel pathways are full life cycle (well-to-wheels) pathways. All greenhouse gas emissions from the full life cycle (feedstock production and transport; and finished fuel production, transport, and use) are accounted for. The greenhouse gas emissions associated with the production of renewable diesel in Singapore and the transport of that fuel to California are 30.48 grams of CO_2-equivalent emissions per mega joule of finished fuel (gCO_2e/MJ).