



Blending of Rendered Animal Fats Cat. 3 for biofuel use

The European Oleochemical Industry (APAG) noticed a significant distortion of the raw material market for rendered animal fats category 3 since the introduction of the Renewable Energy Directive II (RED II) in 2018. Industry believes that due to the characteristics of the feedstock, it presents a high fraud risk. The explicit split between the three categories of animal fats in RED II was made intentionally to distinguish between waste fats (cat. 1 & 2) and rendered animal fats cat. 3 which has uses higher up the Waste Hierarchy including historic uses like the oleochemical industry. APAG calls for stronger auditing capacities to prevent fraudulent blending of its feedstock motivated by financial incentives and legal obligations under by RED II.

What Are Rendered Animal Fats and which are their uses?

Rendered animal fats are products resulting from the rendering of animal by-products (ABPs). ABPs are parts of animals not used for human nutrition (due to cultural, commercial, or safety reasons) such as tissues and fats - the raw materials to produce rendered animal fats.

The rendering process converts animal by-products into protein meal and rendered animal fats under the effect of heat and pressure, making them suitable for nutritional, animal feeding and industrial applications. There are 4 categories (cat.) of fats¹:

- **Animal fats cat. 1** are made of risk materials like brains and spines of animals or any body part of an infected or suspected to be infected with transmissible spongiform encephalopathies (TSE or mad cow disease); and represent a risk for human health. These are used for biofuel production.
- **Animal fats cat. 2** comprise manure, animal by-products containing residues of authorised substances or contaminants and products of animal origin (other than cat. 1) imported from a 3rd country. These fats are also used for biofuel production and some fertilizer applications.
- **Animal fats cat. 3** are high quality fats and a great feedstock for animal nutrition and oleochemical production. These derive from carcasses and parts of animal slaughtered, or bodies/parts fit for human consumption but not intended for human consumption for commercial reasons. These rendered animal fats cat. 3 can only be sourced in Europe for uses in oleochemicals because former net-exporters like the USA, Argentina and Brazil are categorized as cat. 1.¹
- **Edible fats** are fit for human nutrition.

For which purposes does the European Oleochemical Industry use rendered animal fats cat. 3?

Since the 19th century, the European Oleochemical Industry has been using rendered animal fats cat. 3 to manufacture bio-based products used for detergents, lubricants, food additives, pharmaceuticals, wire insulation in electronics and many other applications. Oleochemicals provide alternatives to fossil fuel-based applications and are safe for uses such as in food contact applications. The industry is sourcing rendered

¹ Articles 8, 9 and 10 of Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption.



animal fats cat. 3 in Europe. The availability of EU-sourced raw materials is one of the major aspects that contributes to the success of our industry – a key sector of the European bioeconomy.

Under which circumstances can animal fats be used for biofuels in the EU?

According to Directive 2018/2001 biofuels produced from rendered animal fats cat. 1 & 2 are included in Annex IX, part B. Consequently, biofuels produced with cat. 1 & 2 are promoted via the double-counting mechanism. Rendered animal fats cat. 3 are not listed in Annex IX and therefore biofuels made from this cat. are not subject to double counting. However, because rendered animal fats cat. 3 may be considered as “residues” under the definition in RED II, they are also used for biofuels. The Oleochemical Industry strongly disagrees with this classification as residue, and maintains that animal fats are by-products of the meat production and processing industry, as referred in Regulation 1069/2009.

Is there a risk of blending associated to the use of rendered animal fats cat. 3 in biofuels?

Blending is the process of mixing different feedstocks together and often changes its classification. In practice this means: any blending – by accident or on purpose – of cat. 3 fats with cat. 1 or 2, leads to a downgrade of cat. 3². Where downgrading occurs following an accidental contamination, this process is very much needed to guarantee safety. The production of rendered animal fats cat. 3 is almost 5 times higher than the production of rendered animal fats cat. 1 & 2 fats. Thus, rendered animal fats cat. 3 are an attractive feedstock for biofuels, in particular HVO, posing high-risk of fraudulent blending.³ Chemically, rendered animal fats cat. 3 have the same molecules as cat. 1 & 2. Physically, there is no way to distinguish the categories other than labelling and careful tracking through the supply chain.⁴ Based on the physical and chemical characteristics, there is a risk of blending cat. 3 with cat. 1 & 2, which would allow benefiting from the incentives of Annex IX part B and allows biofuel producers to comply with the targets set under RED II.

We believe that there is a significant diversion of rendered animals fats cat. 3 to biofuels producers.

First, since the introduction of RED II in 2018 and its ambitious targets for biofuels listed in Annex IX, the European Oleochemical Industry has observed an increased demand for rendered animal fats cat. 3 from the biofuel producers. Without it being included in RED II, Part B, the share of rendered animal fats cat. 3 used for biofuels has increased by more than 500.000 tons over the past decade, while the share available for oleochemicals and the animal feed sector has constantly decreased. The biofuels demand increased from 420kTo in 2018 to 790kTo in 2020, while the use of cat 1& 2 remained stable in the same period at around 500kTo for biofuels (see below graph). The use of rendered animal fats cat. 3 for oleochemical decreased from around 800.000 in 2003 to about 380.000 tonnes in 2020, a decline of 47.5% usage of rendered animal fats cat. 3.

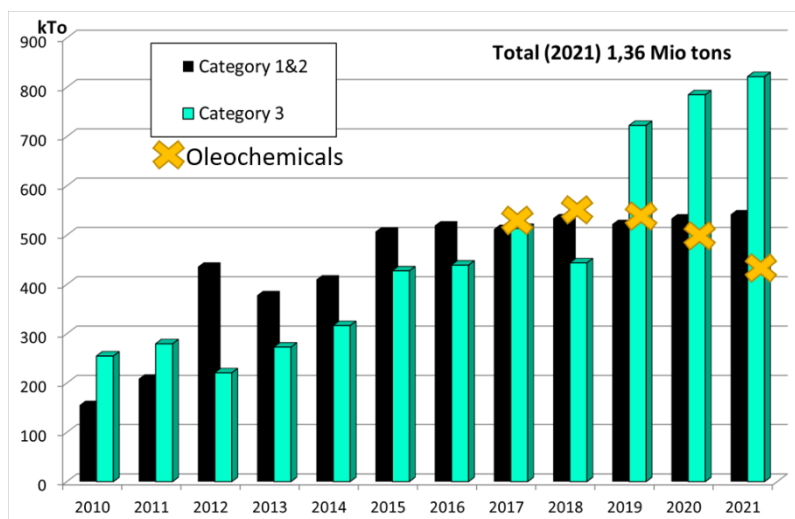


Figure 1 - Use of animal fats (cat. 1, 2 & 3) in biofuels 2010-21, Source: EFPPA, 2022

² Articles 8(g) and 9(g) of Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption.

³ Based on EFPPA data of availability of different fats, e.g. 2021: 3.1 MT rendered fats of which cat. 1 & 2: 0.573MT and cat. 3 including edible fats: 2.54MT

⁴ Traceability in Regulation (EC) No 1069/2009 is mainly focused on not contaminating cat.3 and to a lesser extend the other way around.

In addition, from 2018 onwards, EU gross beef production is expected to fall by 0.6 million t (-8%) between 2021 and 2031.⁵

Second, we believe blending of cat. 3 with cat. 1 & 2 is taking place, which then would qualify a larger quantity for double counting under RED II. The possibility that rendered animal fats cat. 3 are intentionally downgraded to animal fats cat. 1 and/or 2 is real because of their limited availability as by-products from the meat industry. The lower the meat production and/or consumption in Europe, the lower is the availability of rendered animal fats cat. 3. The ICCT (International Council on Clean Transportation) found in 2019 that *“Further, increased demand for animal fat categories 1 and 2 would likely result in down-classification of edible, category 3 animal fats to categories 1 and 2. This is easy to do because if a little bit of category 1 is mixed into category 3, the whole batch gets categorized as 1. Thus, there are likely to be displacement emissions associated with diverting all three categories of animal fats from their current uses.”*⁶

Finally, the European Court of Auditors highlighted in a [report](#) published in July 2015 that: *“regard to waste and residues there is ‘a real risk of fraud’ due to economic incentives (e.g. where ‘the price that can be achieved for feedstock declared to be a waste or a residue is higher than the price of the virgin product).”* The price of animal fats compared to other oils which may be also used for biofuel production including rapeseed, sunflower or palm oil is attractive. With increasing restrictions on feedstocks used for the biofuel production, biofuel producers are looking for feedstocks other than their traditional ones to fulfil their quotas. Ambitious quotas under RED II and a very limited list of feedstocks available for biofuel producers, unintentionally diverts feedstocks, such as rendered animal fats cat. 3 from their historic uses.

Stronger EU Action needed to stop fraud in the system

We call upon a proper auditing system to stop the intentional downgrading of raw material to fulfil the quota under RED II, or its successors and ReFuelEU and FuelEU. Blending is contradicting the intentional split of animal fats: cat. 1 and 2 in Annex IX, part B and the exclusion of cat. 3 from Annex IX. Today, the Directive provides for an auditing requirement to stop fraud, but it is not being applied properly across all EU Member States. Article Art 30 (3) of Directive (EU) 2018/2001 explicitly states: *“The auditing shall verify that the systems used by economic operators are accurate, reliable and protected against fraud, including verification ensuring that materials are not intentionally modified or discarded so that the consignment or part thereof could become a waste or residue.”* APAG members are very supportive of thorough auditing and tracking of animal fats throughout the supply chain, including reporting on any incidents that leads to downgrading rendered animal fats cat. 3 at EU level. However, given the non-harmonized implementation at national level of the feedstocks being considered under Annex IX and the corresponding limits, we believe there is indeed a risk of fraudulent blending.

Verification for auditors is difficult:

- Auditors will not be able to verify based on the physicochemical characteristics if rendered animal fats cat. 3 have been mixed with cat. 1 or 2, and whether this was intentional or an accident.
- To ensure a safe use of feedstock in the European Oleochemical Industry, only European-based rendered animal fats cat. 3 are used. Whilst in Europe, the different categories are distinguished in the ABPR Regulation (Regulation 1069/2009), the same classification is not taking place in other parts of the world⁷.

⁵ European Commission [report](#) on « EU agricultural outlook 2021-31 », page 31

⁶ ICCT: Kein Cap? There's more than meets the eye with the EU's waste fats and oils limit, 2019 <https://theicct.org/kein-cap-theres-more-than-meets-the-eye-with-the-eus-waste-fats-and-oils-limit/>

⁷ In the US, for example, animal fats are referred to as tallow and not distinguished based on their safety concerns.

If rendered animal fats cat. 3 are added to Annex IX of RED II, the raw material distortion will accelerate and conversion to biofuels favoured. Equal access to rendered animal fats cat. 3 for the European oleochemical industry, animal feed and pet food industries will irrevocably be lost.

About APAG

The European Oleochemical Industry is a long-established sector of the European Bioeconomy. Since the early 19th century, the oleochemical industry has been using rendered animal fats cat. 3 and many other applications.

To discover more on the oleochemical industry, go to our [web-site](#) or our [LinkedIn Page](#).

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