U.S. Soy Comments on Draft Amendment to the ILUC Delegated Act

The U.S. Soybean Export Council (USSEC) represents the interests of U.S. Soy, which includes soybean producers, commodity shippers, merchandisers, allied agri-businesses, and other agricultural organizations in international markets. The American Soybean Association (ASA) represents approximately 500,000 U.S. soybean farmers on policy issues important to the soybean industry. We welcome the opportunity to comment on the draft revision of the Delegated Act on Indirect Land Use Change (ILUC). The EU is the second-largest export market of U.S. soybeans.

We are concerned about the designation of soybean oil as a High-ILUC feedstock for biodiesel under the Renewable Energy Directive. In our view, the assumptions, methodology, data, and timeframes used for this designation are inconsistent, discriminatory, and incomplete. If adopted, the act will be negative for U.S. soybean farmers and value chain operators. In addition, it would also have negative consequences for European soybean production and crushing industries, and risks additional soybean expansion in South America, as the EU may end up increasing imports of soybean meal. We urge the European Commission to withdraw this proposal, review the studies, methods, and data on which it was based, and carry out an impact assessment to fully understand the many negative consequences of this initiative before submitting a revised draft Delegated Act.

Total global ILUC Expansion: Inconsistent, Discriminatory and Incomplete

A fundamental problem is that the designation of soy as a High-ILUC feedstock is based on global expansion, without differentiating between regions and countries of origin, even as the Phase 2 feedstock report explicitly recognizes that soy expansion into high-carbon stock land primarily happened in South America. Country-level data on soy expansion into high-carbon-stock land in the Phase 2 report show that the vast majority of expansion is concentrated in South America, with Brazil accounting for 53%, Argentina 23%, Bolivia 17%, and Paraguay 5%. Together, these countries represent 98% of total expansion, leaving only 2% attributable to the rest of the world. This distribution clearly illustrates that ILUC risks for soy are highly region-specific and underscores the need for regional differentiation rather than a global crop-based classification.

Moreover, the increase in the estimated share of soy expansion into high-carbon-stock land from 9.5% (Phase 1 Report) to 14.1% (Phase 2 report) is largely driven by enhanced data collection and refined mapping in Brazil, Argentina, Bolivia, and Paraguay. While improved data quality in high-risk regions is welcome, it also means that South American dynamics increasingly dominate the global outcome. In fact, United States Department of Agriculture (USDA) data show that the total acreage of principal crops[1] production in the U.S. (grains, oilseeds, wheat, cotton, hay) actually <u>decreased</u> from 2014 to 2021 (see table below). Consideration of total acreage is appropriate in the U.S. as these crops are cultivated interchangeably in rotational systems from one year to the next, which is illustrated in the table.

[1] USDA defines “principal crops” as corn, all wheat, oats, barley, flaxseed, cotton, rice, all sorghum, sweet potatoes, dry edible beans, soybeans, sunflower, peanuts, sugarbeets, canola, and proso millet. The footprint of these crops is used to track land-use trends.

Total Crops in Hectares											
Crop Year	Wheat	Feedgrains	Oilseeds			Cotton	Hay	Other	Principal Crops	Prevent Plant	**Crops & PP**
	Total	Total	Soy	Other	Total	Total	Total	Total	Total	Total	**Total**
2014	23,002,737	41,895,729	33,708,695	1,327,490	35,036,186	4,511,597	23,136,283	4,617,342	132,199,873	1,022,762	133,222,634
2015	22,257,306	41,745,509	33,451,315	1,471,882	34,923,197	3,472,405	22,074,388	4,641,744	129,114,549	2,346,954	131,461,504
2016	20,281,226	43,135,038	33,772,231	1,337,729	35,109,960	4,076,601	21,532,109	4,951,288	129,086,221	828,300	129,914,521
2017	18,636,583	40,823,959	36,487,267	1,408,306	37,895,573	5,146,590	21,366,593	4,959,544	128,828,841	1,046,821	129,875,662
2018	19,350,044	40,409,885	36,084,605	1,332,104	37,416,708	5,706,189	21,383,185	4,953,352	129,219,363	765,580	129,984,943
2019	18,407,126	40,716,232	30,796,577	1,372,127	32,168,705	5,558,641	21,215,645	4,583,348	122,649,696	7,940,239	130,589,935
2020	17,988,277	41,385,987	33,732,167	1,433,842	35,166,009	4,893,459	21,139,969	4,956,145	125,529,844	4,137,050	129,666,894
2021	18,915,007	42,821,811	35,286,565	1,393,130	36,679,695	4,538,752	20,532,131	4,846,111	128,333,506	852,562	129,186,068
2014 to 2021	(4,087,730)	926,083	1,577,869	65,640	1,643,509	27,154	(2,604,152)	228,769	(3,866,367)	(170,199)	(4,036,566)

Whereas soybean acreage shows an increase in the U.S. during this period (under 5%), it is well below the EU's High-ILUC threshold of 10% and is the result of a decrease in the acreage of other principal crops, not an expansion into high-carbon stock land. Moreover, the U.S. area growth rate is roughly half of the 1.3% global harvested area growth reported in the Guidehouse assessment, a key parameter in determining High-ILUC classification.

These numbers illustrate that the risk of deforestation and land conversion is not the same across global soy production areas. This has been recognized in the EU Deforestation Regulation (EUDR) which uses a country benchmarking system. USSEC suggests that a similar approach is used for High-ILUC designations under the Renewable Energy Directive (RED).

Flawed Methodology and Calculations

The Phase 2 feedstock report's methods and calculations are flawed, as outlined below.

1) In the 2019 Feedstock Expansion Report, the Commission explicitly acknowledged the lack of evidence for soy-driven deforestation outside South America and applied a transparent and conservative assumption of 2% expansion into forests for the rest of the world. In the Phase 2 Report, this explicit assumption has been replaced by global GIS-based averaging and proportional allocation, without clearly stating how regions with limited or no deforestation, such as the United States, the European Union, or Canada, are treated. As a result, uncertainty is no longer explicitly disclosed but embedded in the modelling framework, reducing transparency and making it difficult to distinguish measured impacts from assumptions. There also appears to be a conflation of direct and indirect land use change.

2) Section 6.5 of the Guidehouse assessment explains more details about the approach of estimating productivity factor (PF) for different crops. While in Table 6-4, it was mentioned that US is one of the top 10 soybean producers in 2021, and US data was included to calculate PF. However, only South American data is used to calculate the land use changes. This is an inconsistency in the methodology. Guidehouse's assessment should either include land use change data for US soybeans or exclude the U.S. in PF calculations for soybeans.

3) In the ILUC methodology, soybeans are intentionally used as the reference crop and are therefore assigned a fixed PF of 1.0, both in the 2008–2016 analysis and in the updated 2014–2021 assessment. By fixing the PF of soybeans at 1, the methodology implicitly treats soy as a neutral benchmark rather than as a crop whose productivity is empirically reassessed over time. This limits the ability of the analysis to reflect recent productivity improvements in soy.

The table below (from the Phase 2 report) compares harvested area growth, production growth, and productivity factors for soybeans and some comparator crops across both assessment periods:

Crop	**Harvested Area growth (2008–2016)**	**Harvested area growth (2014–2021)**	**Production growth (2008–2016)**	**Production growth (2014–2021)**	**PF (2008–2016)**	**PF (2014–2021)**
Soybeans	3.0%	1.3%	4.8%	2.8%	1.0	1.0
Maize	2.3%	1.1%	3.6%	2.2%	1.7	2.0
Palm oil	4.0%	3.5%	5.1%	3.4%	2.5	2.2

Across both assessment periods, soybean production growth consistently exceeds harvested area expansion, indicating that output increases are not primarily driven by land expansion, but by yield improvements. This trend becomes even more pronounced in the 2014–2021 period, where harvested area growth slows significantly while production growth remains robust (1.3% vs 2.8%). In the Phase 2 report, it is stated that productivity factors are defined relative to soybeans, which are set to PF = 1.0 as a normalization reference ("all PF are relative to soybean"). While it is necessary to have a baseline, choosing existing crops within the sample (e.g soybeans) as a fixed anchor becomes problematic when the benchmark crop itself exhibits clear productivity gains over time. This issue is particularly consequential because the productivity factor is the only parameter in the ILUC formula that moderates the calculated share of expansion into high-carbon-stock land (x_{hcs}):

$$x_{hcs} = \frac{x_f + 2.6 \cdot x_p}{PF}$$

For crops with adjustable PFs, productivity gains directly reduce the calculated ILUC impact. For soybeans, however, the fixed PF means that yield-driven growth cannot lower the calculated share of expansion into high-carbon-stock land. As a result, soybean ILUC impacts are structurally locked in, regardless of improvements in production efficiency.

While the productivity factor is partly based on energy yield per hectare, maintaining PF = 1.0 for soy places greater emphasis on relative energy intensity than on observed productivity trends. This risks underrepresenting real-world efficiency improvements and may overstate land-use displacement effects associated with soybean production.

This limitation becomes particularly relevant when examining regional dynamics. U.S. government data show that between 2014 and 2021 soybean production grew at a compound annual rate (CARG) of approximately 1.87%, while harvested area expanded by only 0.65% per year over the same period. In other words, production growth in the United States has been predominantly yield-driven rather than expansion-driven.

3) Table 6-6 in Section 6.5 of the Phase 2 Report provides the average energy yield per feedstock in GJ/ha. Energy yield for soybeans is listed as 19 GJ/ha, which is the lowest across all crops. However, it is not clear whether soybean meal is included in this calculation. To provide a better perspective of the issue and create a more realistic energy balance, the calculation should consider the energy equivalent of all output. This is crucial, as more than half of the energy produced from soybeans is expressed in the meal after crushing whereas other crops (such as wheat and sugar) have lower energy in their co-products. Consequently, if meal energy content is not considered, a significant share of soy's energy

content is excluded. This assumption may have contributed to a lower PF for soybeans compared to the other crops.

Negative Impact on EU Soybean Production, the Soy Market and Expansion in South America
While the proposed High-ILUC classification of soy would have only a minor impact on the EU biodiesel feedstock mix, it would generate disproportionate and counterproductive ripple effects across European soybean production, the European soybean market and lead to additional soybean acreage expansion in South America.

Classifying all soy as High-ILUC risk effectively will largely remove soybean oil from the biodiesel market in Europe and eliminate an important outlet for soy produced in the European Union. Since soybean crushers process soybeans into meal and oil, losing the biodiesel market leaves part of the oil without a guaranteed buyer. As a result, farmers may face lower prices and diminished incentives to grow soy. In combination, these effects undermine the business case for domestic soy production and make it harder for the EU to achieve its protein self-sufficiency goals[2].

According to a report published by the European Biodiesel Board in July 2025[3], 39% of the biodiesel production in the EU is crop based, and of that only 2% is produced from soybean oil. Rapeseed oil is the predominant feedstock at 34%. In fact, crop-based feedstocks have been overtaken by waste-based feedstock in 2022 and that trend continues upward. These numbers are down from just a few years ago when crop based feedstocks accounted for over half of the production, and soy a small fraction thereof.

Recent 2024 figures from Germany, the EU's largest biofuel producing country, indicate that palm oil is no longer used in biofuels, as it no longer contributes towards renewable energy targets. This illustrates how these proposed changes can effectively remove a feedstock with High-ILUC status from the market.

A likely consequence would be reduced EU crushing activity given the importance of the biodiesel market for soybean oil, with roughly 50% of soybean oil from crush going into the biodiesel production. The decrease in crush would increase reliance on imported soy meal to meet the EU's high and continued protein demand for Europe's feed and livestock industries. Perversely, this could increase imports from South America, where ILUC risks are already concentrated. In this sense, excluding soy from EU biofuel targets risks weakening domestic protein autonomy while not impacting indirect land use change substantially. This would directly contradict the EU Protein Strategy's objective of reducing reliance on imported high-protein feedstuffs and strengthening EU soy cultivation.

Given soy's limited contribution to EU biodiesel, it is legitimate to question whether its exclusion would generate meaningful climate benefits, particularly when weighed against the economic consequences for the European soy production and crushing industry and the potential for increased dependence on imports from high-risk regions.

Low-ILUC certification is currently an inaccessible solution
Once assigned the classification 'High-ILUC risk ', the only option to still use that feedstock to count for the renewable energies target is the use of Low-ILUC certification. The requirements for Low-ILUC

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[2] FEDIOL. "How first-generation biofuels can contribute to the EU's defossilisation, competitiveness, and strategic autonomy goals." 2025. FEDIOL_biofuels_factsheet_2025_web__2_.pdf
[3] European Biodiesel Board. "Statistical Report 2024-2025". July 2025. (EBB 2024 Statistical Report).

certification and are documented in Delegated Regulation 2019/807. In practice, this pathway is highly complex and administratively burdensome, particularly for established and efficient agricultural systems.

The main barriers to obtaining Low-ILUC certification include the requirement to demonstrate additionality at the farm or plot level, the establishment of dynamic yield baselines, extensive documentation and auditing requirements, and limited recognition of regional or systemic Low-ILUC characteristics. Certifying feedstocks for Low-ILUC focuses on two criteria: expansion only on marginal or already degraded land, and yield intensification, i.e., producing more output without expanding land. As such, the Low-ILUC certification does not represent a level playing field since it favors regions that can convert degraded pastureland[4] (exactly those regions that are responsible for soybean's High-ILUC expansion), while penalizing high-efficiency producers in the US and the European Union.
This complexity risks undermining the purpose of the Low-ILUC pathway by making it inaccessible to good practitioners and Low-risk supply chains, thereby unintentionally penalizing them under the revised framework.

Conclusion
We urge the European Commission to withdraw this proposal, review the studies, methods, and data on which it was based, and carry out an impact assessment to fully understand the many negative consequences of this initiative before submitting a revised draft Delegated Act. We also encourage the European Commission to consider regional differences and adopt an approach for benchmarking similar to that in EUDR which assigns risk based on the criteria relevant to the regulation in order to remove High-ILUC feedstocks from the supply chain. Additionally, we call on the Commission to conduct a review of Delegated Regulation of 2019/807 and propose amendments to create viable pathways for Low-ILUC origins and feedstocks.

[4] Colussi, J., N. Paulson, G. Schnitkey, C. Zulauf and J. Baltz. "Potential for Crop Expansion in Brazil Based on Pastureland and Double-Cropping." *farmdoc daily* (14):69, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, April 9, 2024.Permalink