

# U.S. Soybean Farmers can Make a difference in Climate Change



Just like the rest of the world, the U.S. is seeking greenhouse gas mitigation opportunities that will help fight climate change. U.S. Soy farmers are meeting the challenge with carbon sequestration – the process of capturing and storing atmospheric carbon dioxide, widely recognized as an effective tool for slowing global climate change.

## Carbon Sequestration Implementation

Plants are important sequesters of carbon, so farmers employing sustainable practices have the power to offset their carbon footprint and that of others.

Through photosynthesis, plants pull CO<sub>2</sub> from the air, break it down and move carbon to the soil while releasing oxygen back into the atmosphere.

In this way, agricultural lands, forests, grasslands and land used for other ag purposes become carbon sinks. When managed sustainably, the natural properties of U.S. agricultural soils create one of the world's most productive carbon sink regions.

## REGENERATIVE AG PRACTICES

Regenerative agriculture practices are helping U.S. soybean farmers make the most of the soil's natural carbon-capturing properties.

- **Minimizing soil disturbance**
- **Maximizing crop diversity**
- **Keeping the soil covered with crop residue and/or growing plants**
- **Maintaining living roots in the soil**
- **Integrating livestock**

### Carbon Farming and GHG Mitigation

Regenerative ag also improves overall soil health and has become part of an emerging opportunity – carbon farming.

By using regenerative ag practices, U.S. soybean farmers can maximize carbon sequestration and have the opportunity to receive payment for the carbon offsets they create.

This has the potential to create an economically sustainable system, providing incentives for farmers to apply climate-smart farming practices while **contributing to greenhouse gas mitigation** and the preservation of natural resources.

By comparison, U.S. soybean farmers have a low carbon footprint. When land use change is considered, such as deforestation to develop more cropland, the U.S. comes in well below countries in South America, such as Argentina and Brazil.<sup>1</sup>

### CARBON FOOTPRINT OF WHOLE SOYBEANS CRUSHED IN EUROPE (Including Land Use Change and Peat)\*

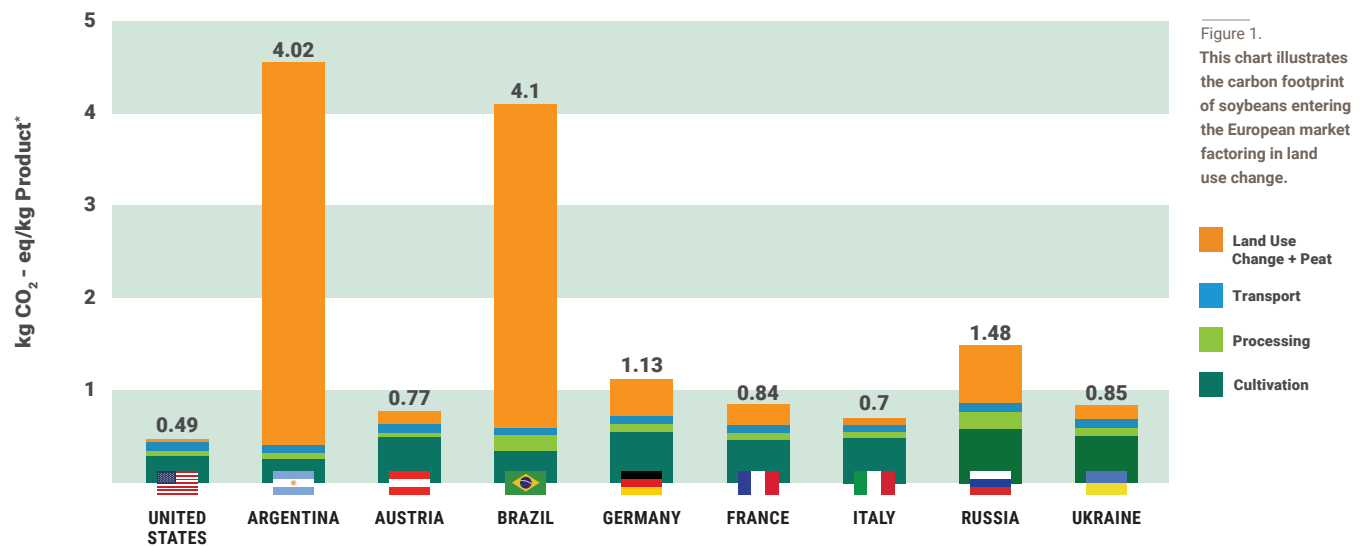


Figure 1. This chart illustrates the carbon footprint of soybeans entering the European market factoring in land use change.

- Land Use Change + Peat
- Transport
- Processing
- Cultivation

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\*Results based on default emission modeling, including land use change emissions, according to the rules of the PEFCR-Feed guidance document (European Commission, 2018) as implemented in the Agri-footprint 6.3 database. Input data rely on country average FAO statistics and other secondary sources. Supplier-specific information would improve data quality and may provide differing results. Comparisons have not been reviewed in the context of ISO 14040/14044 compliance.



**Regenerative agriculture practices used by U.S. Soy farmers provide many benefits to the land, soil, water quality and other ecosystems surrounding soy farms.** These practices are also a part of U.S. Soy farmers long-term impact towards many of the U.N. Sustainable Development Goals (SDG), especially SDG 2—Zero Hunger. Specifically, SDG Target 2.4, states, “By 2030, ensure sustainable food production systems and **implement resilient agricultural practices** that increase **productivity** and production, that help maintain ecosystems, that strengthen capacity for **adaptation to climate change**, extreme weather, drought, flooding and other disasters and that **progressively improve land and soil quality.**”

#### About The U.S. Soybean Export Council (USSEC)

**Soybeans are the United States’ No. 1 food and agricultural export.** The U.S. Soybean Export Council (USSEC) is focused on building preference, improving the value and enabling market access for the use of U.S. Soy for human consumption, aquaculture and livestock feed in 82 countries across the world. USSEC is a dynamic partnership of U.S. soybean producers, processors, commodity shippers, merchandisers, allied agribusinesses and agricultural organizations; and connects food and agriculture industry leaders through a robust membership program. USSEC is farmer-funded by checkoff funds invested by the United Soybean Board, various state soybean councils, the food and agriculture industry and the American Soybean Association’s investment of cost-share funding provided by the U.S. Department of Agriculture’s (USDA) Foreign Agricultural Service (FAS). To learn more, visit [www.ussec.org](http://www.ussec.org) and [www.ussoy.org](http://www.ussoy.org), and engage with us on USSEC’s LinkedIn, Twitter, Facebook, and U.S. Soy’s LinkedIn, Twitter, Facebook, Instagram and YouTube.

1. Mérieux NutriSciences | Blonk, “What is the environmental footprint of U.S. Soy compared to other sourcing countries for the European (and other) markets?” 2020 U.S. SOY Global Trade Exchange & Specialty Grains Conference, September 2020, St. Louis, Missouri.