



The U.S. Soybean Sustainability Assurance Protocol

A SUSTAINABILITY SYSTEM THAT DELIVERS

U.S. soybean production is based on a national system of sustainability and conservation laws and regulations combined with careful implementation of best production practices by the nation's 279,110 soybean farms. In addition, most U.S. soybean producers participate in certified and audited voluntary sustainability and conservation programs.

This Sustainability Assurance Protocol is a certified aggregate approach audited by third parties that demonstrates sustainable soybean production at a national scale.

The U.S. approach is quantifiable and results driven with mass balance international certification available.

The U.S. Sustainability Assurance Protocol describes the regulations, processes and management practices that ensure sustainable soybean production. This Sustainability Protocol is one part of the overall U.S. soybean producer sustainability program which includes a national measurement system of the positive environmental outcomes by producers.

PROTOCOL DIRECTIVES

The protocol has four key directives in this quantifiable and results-driven approach to sustainable U.S. soy production.

- 1. Biodiversity and High Carbon Stock Production Control Measures and Regulations**, which considers wetlands, grasslands, forests and migratory birds
- 2. Production Practices Control Measures and Regulations**, such as conservation tillage, crop rotation, precision farming and other technologies
- 3. Public and Labor Health and Welfare Control Measures and Regulations**, protecting people's health and safety in compliance with U.S. regulations
- 4. Continuous Improvement of Production Practices and Environmental Protection Control Measures and Regulations**, which includes conservation programs, information sharing, and technology training

AUDIT PROCEDURES

Audit procedures include annual internal audits by producers and third-party independent audits of producers. To ensure the accuracy of internal audits made by producers, third-party audits are conducted annually by the U.S. Department of Agriculture (USDA) with inspection agents in over 2,800 offices in agricultural production areas.

INTERNATIONAL CERTIFICATION

Soy Export Sustainability, LLC will provide shipment-specific recordkeeping and documentation information for U.S. soy and ensure proper accounting of mass balance of U.S. soy compliant with this Protocol up to the point where certificates are issued for batches of compliant soybeans and soy products at point of export. The SES advisory council consists of individuals representing a broad cross-section of the soy industry to assure that the efforts of SES are in line with the goals of the stakeholders' organizations



PERFORMANCE INDICATORS

The following reports document producer performance:

- Environmental and Socioeconomic Indicators for Measuring Outcomes of On-Farm Agricultural Production in the United States <http://bit.ly/10d3T52>
- Life Cycle Impact of Soybean Production and Soy Industrial Products (peer reviewed according to ISO 14040/44 Life Cycle Inventory) <http://bit.ly/11atESq>

With the world population estimated to reach 9 billion by 2050, the entire supply chain must work together to efficiently and responsibly lay the groundwork for the future. **Field To Market** is a diverse alliance working to create opportunities across the agricultural supply chain for continuous improvements in productivity, environmental quality, and human well-being. The group provides collaborative leadership that is engaged in industry-wide dialogue, grounded in science, and open to the full range of technology choices. Additional information about this initiative can be found at www.fieldtomarket.org

U.S. SOYBEAN SUSTAINABILITY ACHIEVEMENTS

Greenhouse gas emissions **decreased 41%** per tonne of U.S. soybean production since 1980.

Since 1980, U.S. farmers **increased soy production by 96%** while using 8% less energy

Soy is a part of a **diverse crop rotation plan** produced on 23% of U.S. cropland

78 million hectares in protected U.S. National Forest and Grasslands

USDA commits over \$6.0 billion in conservation funding each year

USDA employs **over 12,000 people** in conservation programs and compliance

10% of available U.S. cropland is taken out of production to protect sensitive areas

U.S. government established conservation programs in 1940s and Food Security Act of 1985 greatly increased conservation efforts monitored by USDA

10% of available U.S. cropland is **taken out of production** to protect sensitive areas

Precision farming using GPS technology allows producers to **precisely apply field inputs** within millimeters

Soil erosion decreased 66% per tonne of U.S. soy production since 1980

10.8 million hectares removed from production to protect environment in Conservation Reserve Program

More than 20 million hectares of production land enrolled in Conservation Stewardship Program

Land use per tonne of U.S. soybean production **decreased 35%** since 1980

91% of U.S. soy travels to export position by barge or rail

Energy use decreased 42% per tonne of U.S. soybean production since 1980

Please visit www.ussec.org/ssap for additional information on sustainable U.S. soy production and web links.