Rendering and Sustainability

The rendering industry plays an important role in the sustainability of animal agriculture and the food system. Some 56 billion pounds of meat byproducts and recaptured cooking oil were rendered in the U.S. last year.

Instead of these animal byproducts filling up landfills or used as soil amendments, renderers efficiently convert them into ingredients for a host of new products, ranging from high value animal feed to bioenergy to personal care and industrial products.

All U.S. landfills would be full in four years without rendering, posing serious public health and environmental problems.

While providing these essential services, renderers boost sustainability by reducing greenhouse gas emissions, conserving fuel and other natural resources, recycling processing heat, and, importantly, by contributing to their local economies and communities.

The Four Main Principles of Rendering Sustainability are:

1. Produce safe animal food and ingredients for consumer/industrial products
2. Practice environmental stewardship and operate efficiently
3. Care for local communities and employees
4. Help feed a hungry world by providing nutritious feed ingredients for animal production by recycling responsibly

NRA works to promote understanding of the rendering industry’s role in sustainability and to enhance the ability of renderers to operate. The industry does not support government policies that direct raw materials (now rendered) to less sustainable treatment options such as composting, anaerobic digestion, or landfilling. EPA’s Food Recovery Hierarchy lists products from rendering as having higher recycling value than these other treatment options.

Principle 1: Rendering Produces Safe Animal Food and Product Ingredients

- All rendered products in the U.S. meet regulatory animal food safety standards. The industry also has its own longstanding rigorous Rendering Code of Practice.
Principle 2: Rendering Practices Environmental Stewardship

- Rendering sequesters 5x more greenhouse gas emissions (GHG) from the environment (such as carbon dioxide) than it emits.
- Rendering’s contribution to carbon emission reduction in the U.S. and Canada is equivalent to removing more than 12 million cars annually from the road.
- Rendering evaporates water from animal byproducts during cooking. This large quantity of water meets federal, state and local standards when returned to rivers and streams.

Principle 3: Renderers Care for Their Community and Employees

- Renderers in the U.S. invest more than $500,000 annually in research by the Fats and Proteins Research Foundation to improve processes, products, and efficiencies.
- Rendering companies and their employees are longstanding members of their communities, improving the quality of life by volunteering and supporting local charities, providing jobs and offering essential recycling services for farmers, restaurants and food service.
- Without renderer pickup of used cooking oil, municipal sewer and wastewater systems can become clogged, resulting in millions of dollars in damage and repairs while compromising water quality.

Principle 4: Rendering Helps Feed a Hungry World by Recycling Responsibly

- Rendered fats and oils account for 30 percent of the feedstock used in biodiesel and renewable diesel production in the U.S.
- Rendered fats and proteins used for animal feed ingredients replace corn and soybeans from 6.3 million acres of average quality U.S. crop land.
- The rendering industry recycles 2.4 billion pounds of used cooking oil/grease from foodservice operations, much of which is used for biodiesel production, representing 4.7 million acres of U.S. average quality soybean land from which soy oil is produced.
- Recycled cooking oil is also used for animal food ingredients equivalent to the production of corn on 619,000 acres of U.S. average quality corn land.
- The rendering industry recycles 2.3 billion pounds of meat and poultry from retail food waste which is used for animal food ingredients equivalent to the production of soybeans on 400,000 acres of U.S. average quality soybean land.