Biofuels are renewable sources of energy used as transport fuels. Bioliquids are renewable sources of energy used in installations, such as power plants and steam raising boilers.

These two terms are defined in the European Union’s (EU) Renewable Energy Directive (RED); a strategy which commits Member States to targets for the amount of energy to be derived from renewable sources. Those targets are 20% of total energy and 10% of energy used in transport.

Both bioliquids and biofuels can be derived from animal by-products and used cooking oils (UCO).
Biodiesel, otherwise known as Fatty Acid Methyl Ester (FAME), is Europe’s most widely used biofuel. It can be produced from vegetable fats and oils such as rape, palm and soya, all of which are used in food and feed, or from animal fats and UCO, both of which are derived from residues or by-products of the food industry but which can no longer be used in food or feed.

Biodiesel is chemically different from fossil diesel but has the same ignition and combustion properties. In Europe biodiesel should fulfill the EN 14214 norm as a prerequisite for blending it with normal fossil diesel. The greenhouse gas (GHG) impact of animal fat FAME is significantly lower than that of vegetable-based biodiesel - animal fat FAME achieves a default value of around 80% fossil CO2 avoidance compared to just over 30% for soya.

Bioliquids are renewable sources of energy; like biodiesel they originate from plant sources as well as from animal fats and UCO. Unlike biodiesel, the energy in bioliquids must be captured in installations such as power plants and steam raising boilers.

Processing animal by-products requires electricity and heat, traditionally generated from fossil fuel sources. However, EFPRA members are able to satisfy a large proportion of their energy needs by replacing much of the fossil fuels they use with the bioliquids they produce from processing animal by-products.

Many different businesses make efficient use of bioliquids to fuel industrial processes, especially the animal by-product processors themselves. They use the bioliquid they produce to efficiently process the fifth quarter.
The RED dictates that the production of renewable energy must fulfill clear sustainability criteria. To ensure that a renewable energy product actually reduces GHG emissions the directive includes a calculation scheme with default values for some common products and describes the method for establishing the GHG impact of others. In this way it allows easy comparison of renewable energy fuels with fossil fuels.

These calculations total the GHG impact of every step in the production of a renewable energy. For example, renewable energy derived from a vegetable source will consider ploughing, sowing, fertiliser use, irrigation, harvesting, drying and conversion.

When assessed on the basis of their environmental credentials, renewable energy products produced by Europe’s animal by-product processors are doubly valuable. This is because they are derived from residues and by-products.

In determining the environmental cost of products, the EU considers the demands production makes on finite resources such as land, water and nutrients. The environmental costs of production are attributed to intended products and not to by-products and residues. Where livestock is reared for meat, for example, the meat is the intended product and bears the full carbon cost of production. Animal by-products and fats are not the primary reason for rearing an animal and they therefore carry no GHG burden.

The RED places high importance on re-using by-products and residues. To encourage the production of renewable energy and its use by end markets, the EU counts their environmental credentials double through the RED. Biofuels derived from animal fats benefitting from this incentive are increasingly replacing fossil fuels, saving GHG emissions across the EU.
EFPRA represents the animal by-product processing sector in Europe. It is a leading authority on the regulation, manufacture, bio-security and nutrient value of processed animal protein and animal fats.

EFPRA has a single primary objective: to continually improve the safety, security and sustainability of European food production by efficiently processing animal fats and animal by-products.

It brings together by-product processing organisations from European member states, and works closely with partners worldwide for the technical advancement of the industry.

For more information about processed animal protein, animal fats and the European by-product processing industry visit www.efpra.eu or call +32 (0) 2 203 51 41.

This leaflet is available to download in spanish at www.efpra.eu

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