

# Leftovers from butchery:

from marginal product  
to sellable raw material  
while respecting nature



## AGRICARNITEC®

Processing plants  
for by-products of butchery.





## Introduction

The butchery process produces food products, but it also results in large volumes of animal by-products. This leads to an operating cost for the Company that has to dispose of these materials. The by-products of butchery do not therefore have any value and do not provide any possibility of income. Agricornitec has been in the market since 1969, providing an alternative for dealing with these by-products that makes an economic return possible. The butchery process makes it possible to obtain two very different types of products - food products and by-products of animal origin.

While the former are immediately used in the food sector, the by-products tend to pose various difficulties for the producer, who has to deal with a number of problems related to waste disposal.

The producer can adopt various solutions to overcome these problems, however, these are not always the most convenient in terms of efficiency and quality.

In most cases that at first appear to be more economic al and easier to accomplish, compared to a real disposal strategy that is more correct and especially more profitable in the medium - long term.

It should be pointed out that using machinery specifically designed to process these products, it is possible to obtain organic substances that are widely sought-after and used in other industrial sectors.

The main products obtained from this mechanical process are flours and fats of both animal and vegetable origin.

Product use	Fats		Meat flours		Feather flours	Blood flours (broken down)		Oil seeds			Rumen
	Without refining	Refined	Normal	Particular*		Haemo-globin	Plasma and globin	Refined oil	Non-refined oil	Seed flour	
ENERGY											
Heat**	•		•		•	•					•
Steam generation	•		•		•	•					•
Biogas (digester)	•		•		•	•					•
Fuels	•		•		•	•					•
Biodiesel (for internal combustion engines)		•							•		
ANIMAL FEED & PET FOOD											
Animal feed	•		•						•	•	
Fish food					•	•					
Pet food	•		•								
COSMETICS, CHEMICALS AND PHARMACEUTICALS											
Cosmetics		•						•			
Soap		•						•			
Chemicals - Pharmaceuticals		•						•			
FERTILISERS											
Fertilisers			•		•	•					•
FOOD PRODUCTS											
Food products ***		•		•			•		•		

\* Particular types of flours made by melting pork fat are used for human food products (e.g. concentrates for cubes)

\*\* Heat is produced by burning in specific furnaces

\*\*\* The plasma is particularly used for sausages



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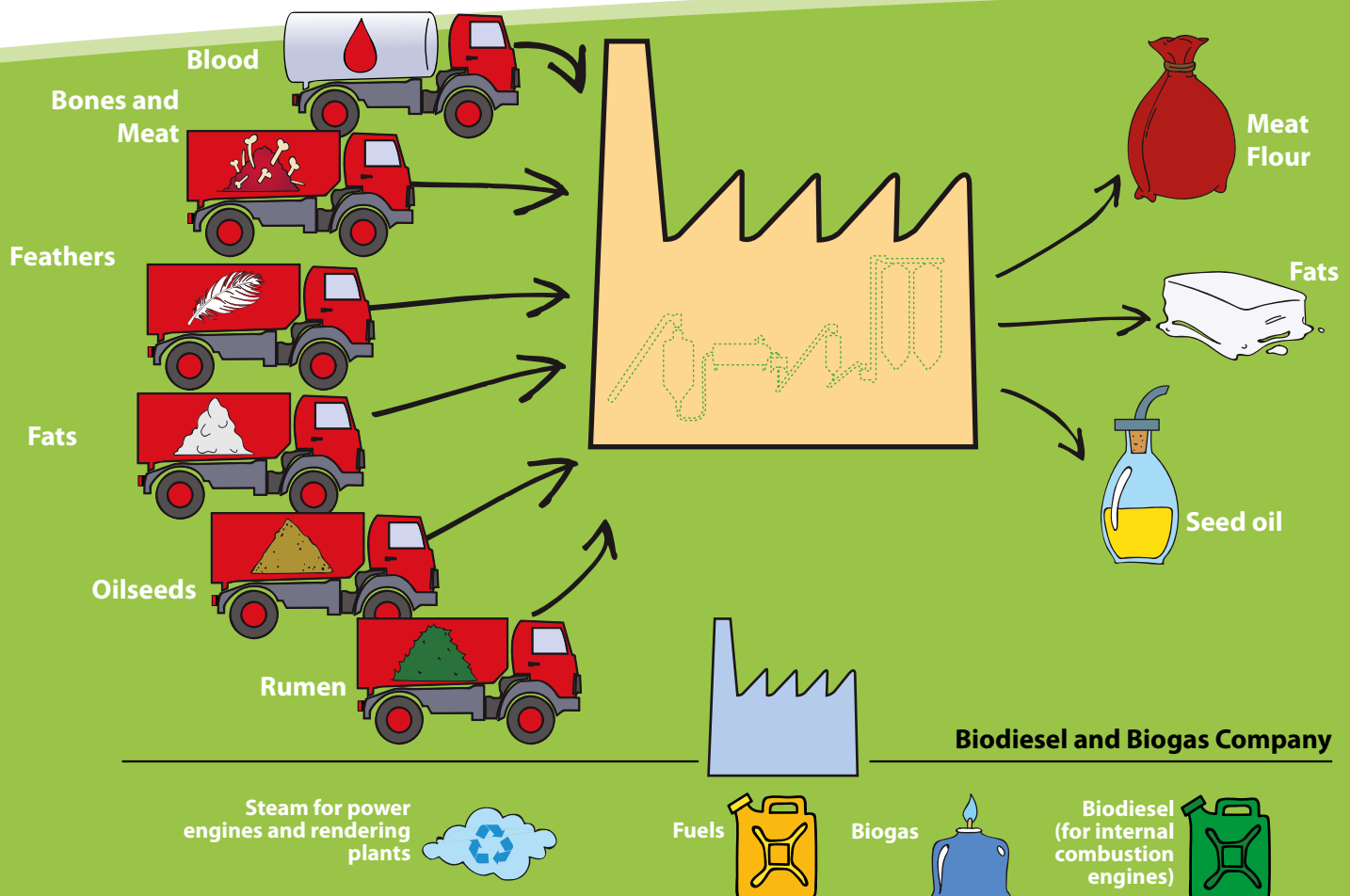
## Energy

The section that looks after researching and producing alternative energy sources has recently undergone strong growth in the direction of using biomass to make bio-fuels.

By means of a specific by-product process the raw materials can be produced that are required to produce renewable energy, which has now become essential, given the recent crisis that has struck the entire sector. Biodiesel and biogas are therefore the new keywords, along with sustainable development and continuous innovation. Recycling this material makes it possible to reduce medium - long term costs, with high product performance. In fact, biodiesel can be obtained by means of a process of refining refined animal fats or by using oils. Our Company supplies a complete range of machines and plants for pressing oil-bearing seeds, as well as a range that can be used to obtain the fats that are required to make biodiesel.

Alternatively, biogas can be produced, which is done by fermenting various organic components such as animal fats, which are fed into a digester in order to obtain methane.

Lastly, but of no lesser importance, there is energy produced by using animal flours, due to their calorific power. The energy obtained in this way can be used within the same plant or to produce electricity.



Continuous mincer



Receiving hoppers



Bone crusher



Continuous press for squashing feathers







## Animal feed & Pet food

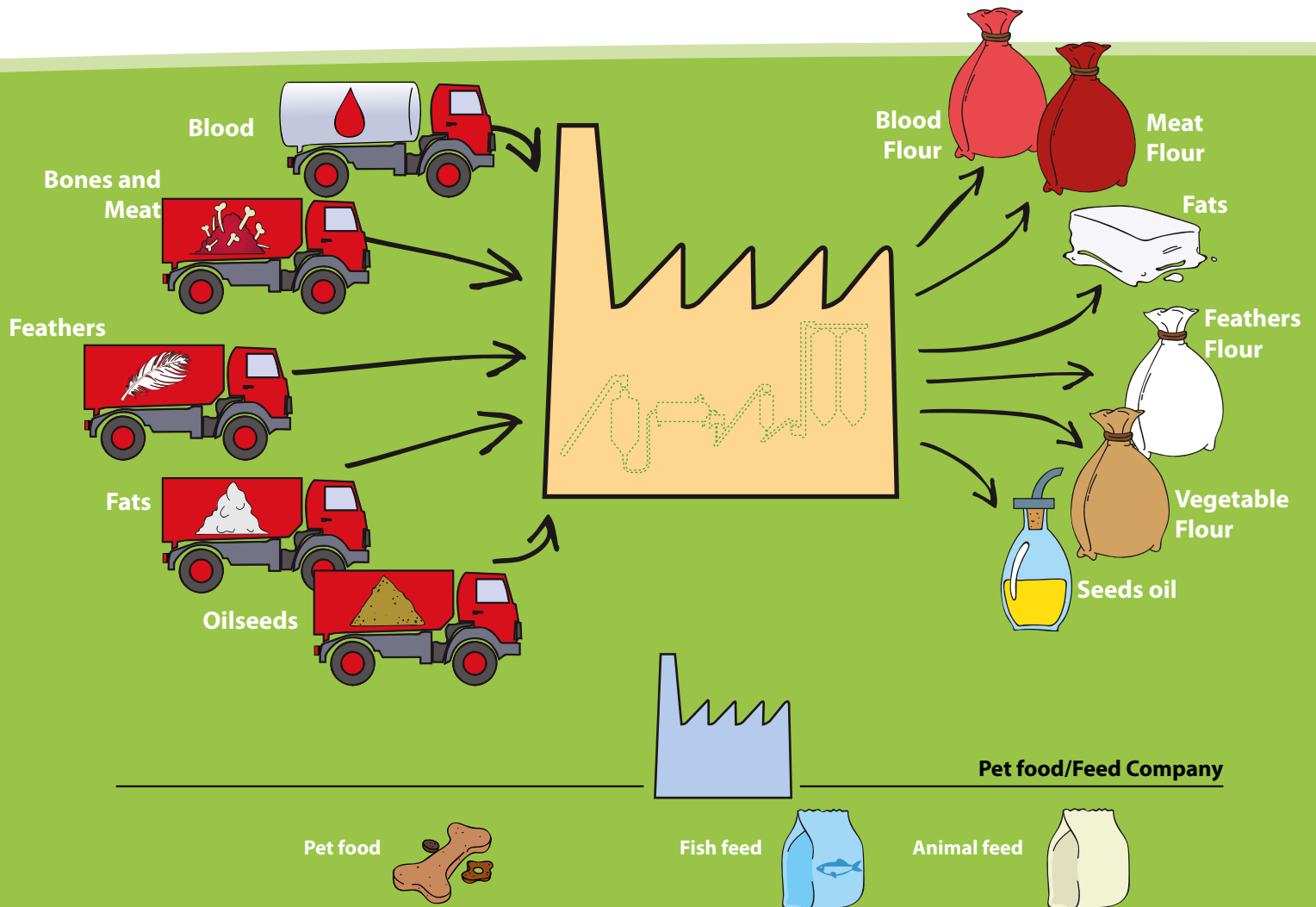
Butchery by-products are widely used in the animal feed sector, with the making of animal feed and protein powders for cattle farms and for making pet food.

A wide range of food products can be obtained by using various products, and these are used to nourish various types of animals.

Fats and flours are the main by-products that can be obtained by processing leftovers. A large part of these have always been used to make feed for animals.

Over the last decade the pet food sector has also played an important role, backing up and rounding off the entire sector. Feathers and blood are also processed to make widely used food for fish farms.

Finally, there is animal feed of vegetable origin that, by processing oily seeds and lucerne using our machinery, provides a valid substitute, with the possibility of using flours, seed oils and desiccated lucerne.



Elliptical rotor electric pump



Continuous hydrolizer-sterilizer



Continuous cooker



Condenser



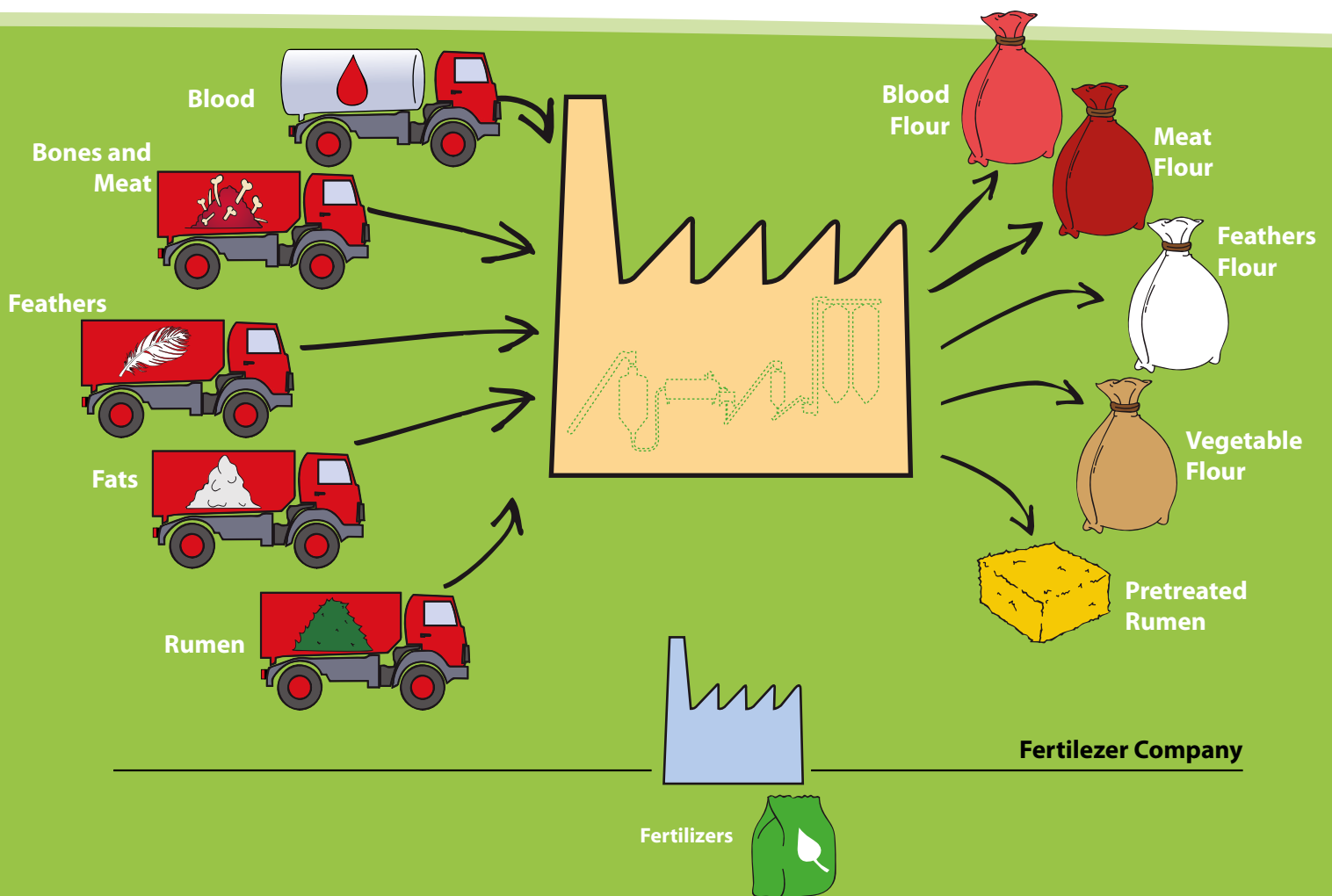


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## Fertilisers

All butchery by-products can be processed using our machinery and can be used as base substances for making composts and fertilisers for agriculture.

Unlike chemical fertilisers, those of organic origin are completely biodegradable and biocompatible. In fact, they enrich the soil, giving it the correct nutritive balance. Thanks to the desiccation and high temperatures butchery by-products are subjected to on our lines, the products obtained in this way guarantee that fertilisers are made that are fully compatible with the environment, with less disposal time for the land. Also they do not transmit chemical elements that are harmful to health to the agricultural products.



Pneumatic conveyor



Cooking autoclaves



Continuous single screw press



Continuous double screw press





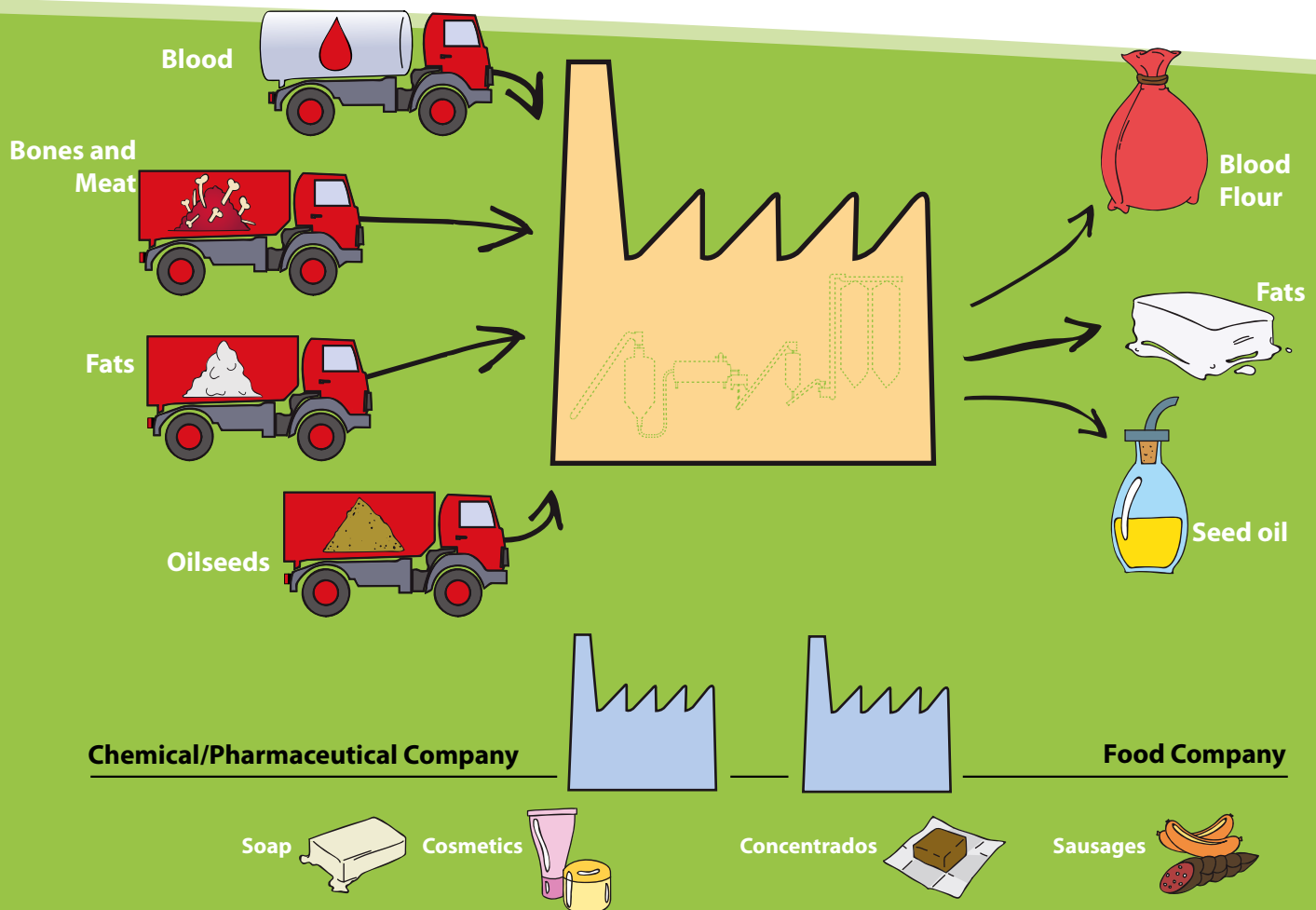
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## Cosmetics, chemicals, pharmaceuticals and food products

The cosmetics sector makes wide use of animal and vegetable products that are essential for producing numerous products that are used daily.

By using our machinery it is possible to extract raw materials from the by-products of animal and vegetable origin, that are useful for making soaps and creams, as well as for producing chemical fertilisers and pharmaceuticals.

Also some substances are used in the food sector, for things like sausages and some types of concentrates.



Ram mill



Continuous desiccator



Continuous cooler  
for flour



Silos for storing  
solids and liquids





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## About us

Agricarnitec, the leading European Company when it comes to supplying machinery for processing butchery by-products, supplies complete high quality lines covered by recognised European certification, and is able to guarantee maximum reliability of all its equipment, thanks to its experience in the sector.

Agricarnitec also supplies various components to other companies for processing products other than those for which they are specifically intended, such as making vegetable oils and animal feeds.

### Services:

- Design
- Construction and Installation
- Assembly
- Testing and start-up
- Technical inspection on the user's premises
- Checking and maintenance
- Supplying spare parts
- Specialist teams of pipefitters, electricians, and mechanical assemblers
- Supply of complete plants
- Vast range of machinery and accessories

### Our values:

- Customer care
- Technical assistance, maintenance and spares
- Assembly and start-up
- Technical inspections and checks
- The quest for Quality
- Relations with suppliers
- Maximising technical efficiency, with the possibility of using a line for multiple production processes

Make it useful,  
make it green!

## Agricarnitec around the world

### Representatives

- Spain
- Poland
- Greece
- Russia

### Italy

Ancona	Latina	Rome
Bari	Mantua	Rovigo
Belluno	Milan	Salerno
Benevento	Modena	Sassari
Bergamo	Naples	Teramo
Brescia	Padua	Turin
Cagliari	Palermo	Treviso
Campobasso	Parma	Trieste
Catania	Pavia	Varese
Cremona	Pisa	Venice
Cuneo	Pordenone	Vercelli
Florence	Reggio Emilia	Verona
Forlì	Rieti	Vicenza

### Other countries

Algeria	Germany	Slovenia
Angola	Greece	Spain
Argentina	England	Switzerland
Australia	Iraq	Hungary
Belarus	Yugoslavia	Uruguay
Brazil	Mexico	Venezuela
Bosnia	Netherlands	Yemen
Chile	Peru	
Colombia	Poland	
Cuba	Romania	
Croatia	Portugal	
Denmark	Russia	
France	Seychelles	



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