One of the common tendencies of animal production activities in Europe and in developed countries in general is to intensify the animal production and to increase the size of the animal production units. High livestock density is always accompanied by production of a surplus of animal manure, representing a considerable pollution threat for the environment in these areas. Avoiding over-fertilization is not only important for environmental protection reasons but also for economical reasons. Intensive animal production areas need therefore suitable manure management, aiming to export and to redistribute the excess of nutrients from manure and to optimize their recycling. Anaerobic digestion of animal manure and slurries offers several benefits by improving their fertilizer qualities, reducing odors and pathogens and producing a renewable fuel – the biogas. The EU policies concerning renewable energy systems (RES) have set forward a fixed goal of supplying 20% of the European energy demands from RES by year 2020. A major part of the renewable energy will originate from European farming and forestry. At least 25% of all bioenergy in the future can originate from biogas, produced from wet organic materials such as: animal manure, whole crop silages, wet food and feed wastes, etc.