

## **Project title:**

Interdisciplinary research on improving energy efficiency and increasing the share of renewable energy sources in the energy balance of Polish agriculture.

Acronim: **BIOGAS&EE** (IUNG as a partner) (2015-2018).

Conventional power plants, using the controversial and non-environmental friendly co-firing technology, buying large quantities of biomass, distort and degenerate the biomass market, hindering the development of local, dispersed energy which, according to current knowledge, seems to be the most effective way of using renewable energy sources, stimulating the economic development and growth of regions as well as an increase of energy security.

Centralised power industry based on agricultural sources raises reasonable doubts as it leads to reductions in equipment efficiency, logistical problems and market disruption. Thus, while speaking about sustainable energy, we must take into account the efficient use of resources (substrates), process efficiency, biodiversity (e.g. in biomass production), the impact on the climate and the environment (the problem of pollution), social (including food security) and economic aspects (e.g. the impact of bioenergy industry on the labour market and energy security). The Project prepared by the Consortium touches upon all mentioned aspects, offering a comprehensive and interdisciplinary approach to the issue, thus providing the creation of new technological solutions to stabilise the production and ensuring decent income for agricultural producers, even if income from standard agricultural production does not guarantee stability.