SCIENZA PER AMORE

TUSCIA UNIVERSITY
HYST TECHNOLOGY
CONFERENCE ON:
NEW PROSPECTS FOR THE USE OF AGRICULTURAL RESOURCES

On 24th May 2012, the Special Training and Development Agency of the Viterbo Chamber of Commerce (CeFAS) hosted the conference "*HYST Technology: new prospects for the use of agricultural resources*", organised by the Tuscia University, CeFAS and the Scienza per Amore Association in collaboration with *BioHyst*.

The conference was opened by Stefano Gasbarra, Director of CeFAS, which in the 80's organised management training programmes for developing countries. "*It's in our DNA to pay close attention to such issues*" he said addressing the *Scienza per Amore* Association. In his speech Dr. Gasbarra took the opportunity to bring greetings on behalf of Leonardo Senni, the Head of Energy Department of the Ministry for Economic Development.

The conference proceeded with welcome greetings by Engineer Danilo Monarca, professor at Tuscia University, vice president of the Italian Association of Agricultural Engineering (AIIA) and promoter – along with Professor Maurizio Carlini – of the Interdepartmental Centre for Research and Dissemination of Renewable Energy (CIRDER).

Professor Carlini, Tuscia University, presented an overview on the future of bioenergy and benefits arising from the use of biofuels and biogas. "*We have to make choices that are, yes sustainable but, sustainable all the way*" he declared.

Engineer Pier Paolo Dell'Omo, Department of Energy Engineering at La Sapienza University of Rome, illustrated the basic principles of HYST technology and its application in the pretreatment of lignocellulosic biomass for the production of second generation bio-methane. "*Residues from cereal crops as well as forestry and arboriculture residues have an energy potential equal to 40% that of the gasoline consumed in Italy every year. […] Currently, not a lot of second generation biofuels are on the market, production being only 0.1% that of all biofuels. This is due to technical difficulties yet to be overcome. HYST pretreatment overcomes these technical difficulties and has excellent energy efficiency. In fact, HYST consumes only 25 kWh of electricity per ton of material processed. At present there are no other pretreatment systems that are sustainable both in terms of energy and cost. […] HYST biomethane not only costs half that of first generation biofuels, but it is also competitive compared to conventional fuels*."

Dr. Francesca Luciani, Italian National Health Institute (ISS), focused on the use of HYST in the food sector – both for human and animal nutrition. "*With HYST processing we could be avoiding the huge waste of nutrients found in agricultural by-products by using 100% of what nature gives us. This way it is possible to maximise both resources and the disposal of waste*."

Luca Urdich, Scienza per Amore Association, illustrated the pilot project developed for Senegal and the Horn of Africa based on the use of cereal straw commonly found in those areas.
"*The pilot project fulfils three functions: first, meeting food and energy needs; second, being self-sufficient from the point of view of energy and water and supplying the surrounding communities in areas lacking necessary infrastructures; third, in collaboration with national and international research centres, experimenting the treatment of other local plant biomass." Finally Urdich pointed out that: "HYST technology can be considered the missing piece that creates a synergy between 3 sectors – agriculture, farming and energy – with a reciprocal exchange of by-products and waste*

that can fully exploit available biomass via a sustainable process that safeguards the environment. All this, therefore, makes the humanitarian project Bits of Future: Food for All a concrete project, a project whose fundamental objective is to initiate stable processes that lead to self-sufficiency in food and energy for the benefit of the people."

Dr. Daniele Lattanzi of BioHyst closed the conference with an analysis of the possibilities resulting from the introduction of this technology in Italy and more specifically in the Tuscia area. "*The Viterbo province holds 1/3 of the cereal crop residues of the entire Lazio Region. […]It is possible to start up a project involving the construction of 2 or 4 HYST plants that, by exploiting this biomass for the production of biomethane for vehicles, could produce about 16 million cubic meters of methane with an estimated market value of approximately 16 million euros*." Dr. Lattanzi concluded by stressing: "*We do not wish to put ourselves forward as competitors to traditional fuel producers, but we do wish to respond to a market demand resulting from a legal obligation*."

Among the participants were several representatives of the African Movement who expressed their interest in HYST and emphasized the urgency of implementing the project *Bits of Future: Food for All* without delay – a humanitarian project which has already been amply presented to government representatives of African countries.

Associazione *Scienza per Amore*
Tel. 06 4190342
fax 06 41405710
press@scienzaperamore.it
www.scienzaperamore.it

Barbara Carrubba
External Relations
mobile 348 0621305

Tatiana Crisafulli
Press Office
mob. 0039 3498648883