

ITALIAN STAKEHOLDERS MEETING ON BIOREFINERIES IEA BIOENERGY TASK 42, POLIBRE (TORTONA), ITALY 4 APRIL

Introduction

On the base of the European mandate that provides at 2020 an Italian energy production from renewables of 17%, it is possible to foreseen an overall renewable energy production of 22.3 Mtoe. Bioenergy will contribute by 45% (9.8 Mtoe) to this target. This engagement is congruent with the Italian bioenergy potential that has been estimated to be roughly 15 Mtoe without including energy from microalgae.

In this framework, biorefineries represent the evolutionary scenario of the bioenergetic industry consisting in an integrated production of energy and raw materials to be used as building blocks for innovative products in substitution of the fossil materials.

The Italian stakeholders day in the biorefinery sector has been promoted by ENEA (Italian National Agency for the New Technologies Energy and Sustainable Economical Development) and Chemtex (Mossi & Ghisolfi Group) and has been hosted in Tortona by POLIBRE (Innovation Pole for renewable energies). It represents a technical table for the sector experts inserted in the frame of the Task IEA 42 activities.

The final objective of the meeting has been to favour the knowledge triangulation among the academical, applied and industrial research so as to render the biorefineries a concrete opportunity for a sustainable development of the Italian economy.

Following, the agenda of the meeting is detailed.

Italian delegate in the task IEA 42
Isabella De Bari

Welcome from M&G and POLIBRE:

Dr. Giordano Dario from M&G and Eng. Fabrizio Longa from Polibre

Role and activities of POLIBRE, Innovation Pole for the Renewable energies and Biofuels, (Scientific and technological Park of Tortona)

Eng. Fabrizio Longa, POLIBRE

IEA Bioenergy – Task42 on Biorefining,

Drs.ing. René van Ree, Co-ordinator IEA Bioenergy Task 42

Full Sustainable Chain Assessment Biofuel-driven Biorefineries,

Dr. Gerfried Jungmeier, Joanneum Research (AT) and Member IEA Bioenergy Task 42

A Dutch Biorefinery Example – YXY Building Blocks: A Biorefinery Approach towards Fuels and Plastic Applications,

Dr. Ed de Jong, Avantium (NL) and Member IEA Bioenergy Task42.

Biomass to sugar with PRO.E.SA™ Technology: *Enabling Biobased Chemicals*

Eng. Dario Giordano, Mossi & Ghisolfi

Current status of Biorefineries in Italy: R&D activities

Dr. Isabella De Bari, ENEA, member task IEA 42

Thermochemical conversion of biomass

Dr. Donatella Barisano, ENEA

Production of bioplastics from biomass: the case of the Italian Biorefinery in Terni Novamont:

Dr. Giulia Gregori, Novamont

Biodiesel: first and second generation

Eng. P. Corvo, BioFuel Partners

Microorganisms: the real stars of the energy/chemical production from biomass.

Dr. Lorenzo Favaro, University of Padua

Activities of the IT-SusChem: analysis of some case studies for the production of chemicals from renewables

Dr. Danilo Santoro, Ambra Polimeri

Lunch

Agrofood byproducts and Biowaste as alternative feedstocks for more sustainable multipurpose biorefinery schemes

Prof. Fabio Fava, University of Bologna

An integrated approach to microalgae culture in Italy.

Dr. Fabio Barbato, ENEA

The combined valorization of bio-products and byproducts: the cases of micro algae production and glycerol conversion.

Dr. Fabrizio De Poli, ENEA

Use of aquatic biomass for the production of biodiesel and hydrogen

Prof. Michele Aresta, University of Bari

Production of bioethers

Prof. Walter Mirabella, Federchimica Division of Renewable Sources

Use of furfural as platform molecule for the production of energy and chemical products.

Prof. Gabriele Centi, University of Messina

Industrial biotechnologies and biocatalysis: the sustainable route to biofuels and bio-based chemicals"

Dr Alberto Battistelli, National Research Council

Lignin Valorization through Thermochemical Processes

Prof. David Chiamonti University of Florence

"From bio fuels to solar fuels"

Prof. Guido Saracco, Politecnico of Turin

Sustainability of biomass production in NW part of Italy

Prof. Remigio Berruto

Conclusions
