



Waste biorefinery technologies for accelerating sustainable energy processes

WG2- BIOREFINERY CONVERSION TECHNOLOGIES

Dr Marta Trninić

The Academy of Technical Applied Studies Belgrade
University of Belgrade Faculty of Mechanical Engineering

11.5.2022.



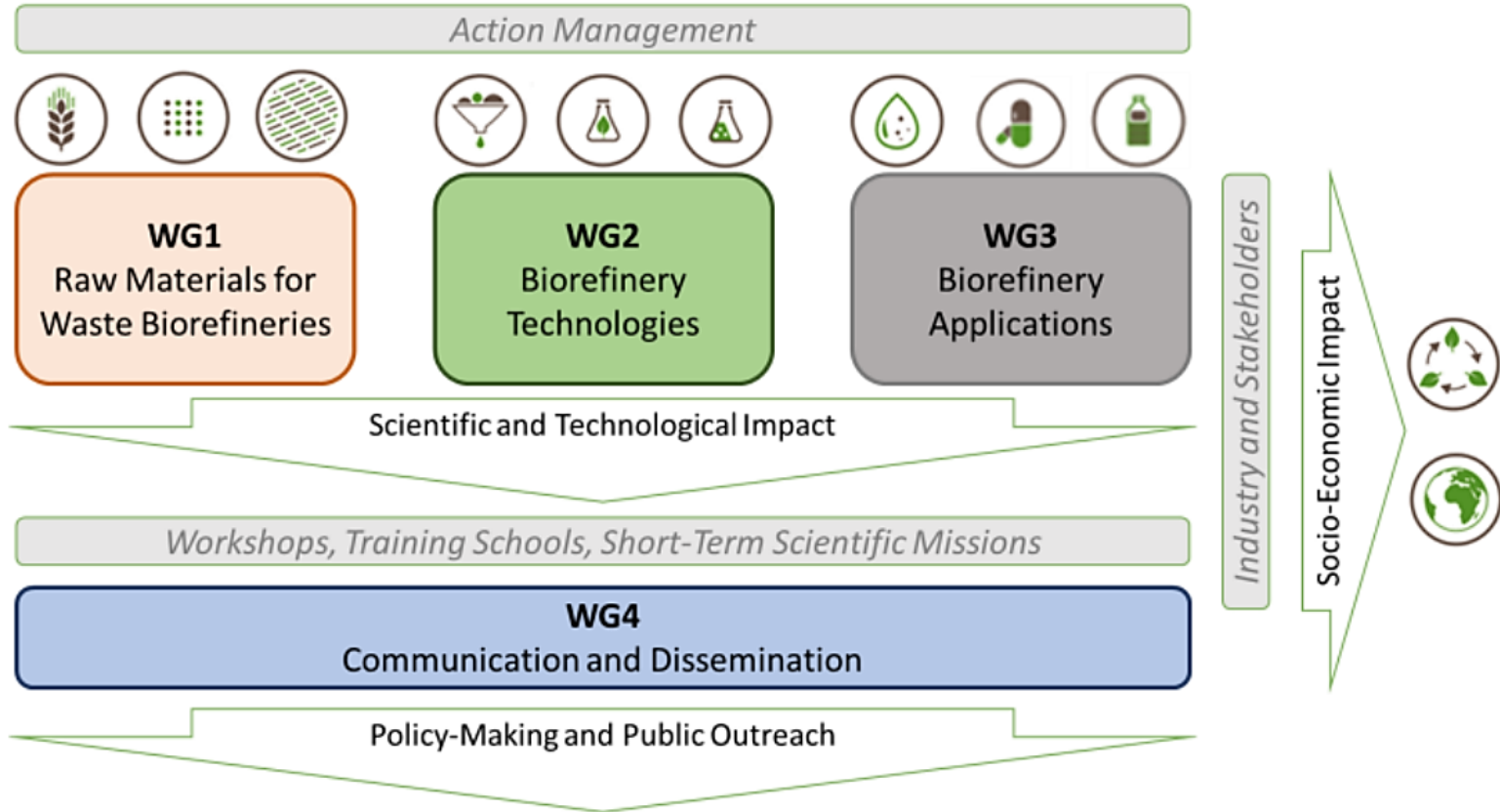
Funded by
the European Union



Contents

- Introduction to WG2 - Biorefinery Technologies
- WG2 season speakers
- Round table

WIRE COST ACTION structure



INTRODUCTION TO WG2

Biorefinery Technologies

BIOMASS WASTE STREAMS

- forestry waste
- agro-industrial wastes
- msw



SUPPLY CHAIN & PRE-TREATMENT

BIORAFINERY PLATFORME

- thermochemical
- biochemical
- electrochemical
- hybrid etc.

PRODUCTS

FUELS AND ENERGY

- CHP
- lignin
- biogas,
- ethanol,
- methane,
- syngas,
- hydrogen
- hydrochar etc.

BIOCHEMICALS

- activated carbon
- agricultural chemicals
- fatty acids etc.

BIOMATERIALS

- composite materials
- pigments
- adhesives
- oils and inks etc.

1. Lessons learned from 1st generation biorefineries.
2. Creating a collaborative framework and database within the Action's website.
3. Establishing a roadmap of technologies that can be integrated into waste biorefineries.
4. Providing support and guidance to stakeholders interested in the integration of biorefinery technologies.
5. Retrieve information regarding successful and unsuccessful cases. (update the collaborative database)
6. Plan the involvement in R&D projects to create and add knowledge to/from the collaborative database.

21 Countries

- Austria,
- Belgium,
- Denmark
- Estonia,
- Finland,
- France,
- Germany,
- Greece,
- Hungary
- Iceland,
- Italy,
- Ireland,
- Netherlands
- Norway,
- Portugal,
- Russia,
- Serbia
- Spain,
- Slovenia
- Turkey,
- United Kingdom.

60 Experts from:

- 44 Universities and Research Institutions
- 3R-BioPhosphate Ltd. Hungary - technology intensive company playing a leading role in zero emission pyrolysis technology engineering, phosphorus recovery and biochar industrial production.

WG2 Participants



WG2 season speakers



Dr. Corinna Netzer

*Norwegian University
of Science and
Technology, Norway*



Prof. Dr. Reinhard Rauch

*Engler-Bunte-Institute,
KIT, Germany*



Dr. Bert Lagrain

*KU Leuven,
Belgium*

ROUND TABLE

Research and working plan discussion

THANK YOU!