3rd International Conference on Biomass Utilization and Sustainable Energy 2023 (ICoBiomasSE 2023)

Monday, 4 September 2023 - Tuesday, 5 September 2023

World Trade Centre (WTC)

Topics

SUSTAINABLE BIOMASS RESOURCES FOR DECARBONISING THE ECONOMY

Biomass potentials and biomass production system
Novel crops and energy grasses
Biomass residues to products and food
Algae and aquatic biomass production systems
Crops from marginal land
Postharvest technology for biomass storage system
Phyto-remediation solutions for contaminated lands

BIOMASS CONVERSION TECHNOLOGIES FOR BIOENERGY

Production and supply of solid fuels and intermediates
Oil-based and renewable hydrocarbon biofuels
Biofuels (biogasoline, renewable diesel, renewable jet fuel) from lipids
Cellulosic biofuel production
Biomass to electricity generation
Biomass chipping, pelletising, briquetting
Production and characterisation of solid fuels from biomass feedstocks
Advanced combustion systems
Artificial intelligence in biomass conversion
Anaerobic digestion for biogas and biomethane production
Advanced plant and fermenter concepts

BIOMASS CONVERSION TO INTERMEDIATES AND PRODUCTS

Biomass to Advanced Biomaterials
Production of thermally treated solid fuels and products
Production of bio-based chemicals and materials
Hydrothermal processing of biomass
Value-added compounds extraction
Biomass for Wastewater Treatment
Energy balance and techno-economic analysis.
Hydrotreating, Biological sugar upgrading, biocatalytic processes, FT-liquids / Biomass to Liquids (BtL), Hydrothermal processing. Hydrotreated Vegetable Oil (HVO) / Hydroprocessed Esters and Fatty Acids (HEFA);

Biorefineries

BIOECONOMY SUSTAINABILITY, IMPACTS AND POLICIES

National and international sustainability standards
Competition and risk mitigation of the increased use of biomass
Bioenergy, food security and local, traditional use of biomass
Impacts on land, agricultural intensification, water and air emissions from biomass production and conversion;
Land use and land governance;
Life Cycle Assessment.
Climate impacts and GHG performance
Biomass utilisation concepts for bioenergy and biobased products
Strategies for the integration of bioenergy into a bio-based economy.
Approaches for efficient management of natural resources (land and water)

BIOENERGY INTEGRATION

Strategies for biomass integrated into energy systems
National strategies for the integration of bioenergy and high share of renewables
Integrated bioenergy planning
Concepts and approaches for flexible bioenergy integration
Renewable energy communities and buildings
Bioenergy and off-grid systems
Bioenergy in integrated systems
Sustainable bioenergy solutions for local communities
Bioenergy in rural electrification concepts
Hydrogen production, storage and use;
e-fuel production and use.
Market uptake initiatives and policies;
Initiatives for decarbonisation of the economy;
Challenges of scale-up and market implementation of new technologies;
Risk assessment of financing;
Biomass trade, contracting and logistics;
Innovative business models.
R&D strategies for international cooperation;
Partnerships programmes for supply security.