Sustainable energy and bio economy in Moldova

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DANUBE-INCO.NET EVENTS FOR THE DEVELOPMENT OF BIO-BASED ECONOMY IN THE DANUBE REGION

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Association for Applied Social Studies  
“ASSTREIA” NGO

Our goal / mission
To contribute to Moldovan society development through different kind of projects in the field of: renewable energy, cross border infrastructure, waste management, environment, ecology.

Projects developed:
• Cross border Inventory of Degraded Land – CRING
• CROSS-BORDER WASTE MANAGEMENT TOOL FOR RURAL LOCALITIES, CBCRurWaste
• Renewable energy with zero CO2 emissions for Drochia sport School”
• Implementation of Renewable Energy and Energy Efficiency Project for public buildings
• Innovative Intelligent Infrastructure – i3 (Smart cities 2016)
• Eastern Partnership Energy and Climate Initiative (EPECI) (International Climate Initiative – German Federal Ministry of Environment)
• Renewable energy with zero CO2 emissions, Swedish Agency for Economic Growth and Regional Development
Drochia sport school

Renewable Energy and Energy Efficiency Project for public buildings

Cross border Inventory of Degraded Land

Kindergarten nr.11 Ungheni
Energy efficiency and renewable energy

Climate change and diminishing resources, such as oil, phosphate and other commodities, are driving a need to change the ways of production. The need to be more energy- and material efficient is not so much dictated by environmental concerns, but rather by the threat to the supplies of these basic resources.
Bioeconomy in Europe

- According to an EU survey ordered by the European Commission in 2015-2016, bioeconomy in Europe is not new, accounting already more than 2 trillion € annual turnover and almost 20 million jobs. These numbers include food production and agriculture. The current market share for biobased products in EU28 is already significant and it is growing fast. Consumer awareness and product availability is increasing in European markets, and innovations will be brought faster to market via initiatives such as the “Biobased Industries Initiative The biobased products market demand in the EU is expected to double by 2030.

- Being an EU Associate country with a predominantly agricultural economy, bio-based economy represents a national priority in our country, in particular since the use of existent biomass can become one of the most
Energy, Climate Action and Agriculture

The Europe 2020 Strategy contains targets for sustainable growth. These are:
1) reducing greenhouse gas emissions by 20% compared to 1990 levels by 2020;
2) increasing the share of renewables in final energy consumption to 20%, and;
3) moving towards a 20% increase in energy efficiency.

The National Renewable Energy Action Plans (NREAPs) of Member States (MS) show that they expect to meet half of the 20% renewable energy target through bioenergy. Biomass will make up 19% of total renewable electricity, 78% of total renewable heating and cooling and 89% of total renewable energy in transport in 2020 according to the NREAPs. One can hence conclude that with the RED the EU stimulates the development of the bioenergy sector.
Renewable energy sources in Moldova

• In Moldova, the energy production from renewable resources, during the years 2010-2014, has increased from 7 to 11% in the energy balance of the country.

• Project "Energy and Biomass", funded by the EU UNDP, which are focused on strengthening the bio-energy private sector development via piloting public-private partnerships aimed at ensuring sustainable supply of biomass heat, quality assurance of domestically produced biofuel and co-financing the first laboratory to test the biofuel quality produced in the Republic of Moldova.

• 144 public institutions have changed inefficient heating systems to biomass boilers that work with the power of 29.6 MW;

• ”80 modern biomass heating plants coupled with 21 solar collectors installed in schools, kindergartens, and community centers; 300 biomass-fired boilers provided at subsidized prices to households and microenterprises; seven public-private partnerships set to supply bio-energy”

• They were implemented wind generators with total power of about 1 MW; 500 kW geothermal heat pumps; the 2MW biogas; 500 kW solar collectors. According to calculations in the near future, the fuel from biomass, in total, can cover up to 20% of all the country's energy needs.
Proposed actions to support the development of a bio-based economy

ASSTREIA’s focus industrial biotechnology is to identify the potential contribution of biotechnology able to deliver sustainable growth and development, and to identify and appraise policy options for supply and demand side interventions that can drive efficient transition towards bio-based economy.

Using the current trends brought and promoted by the globalization, ASSTREIA is in search of partners capable to deliver industrial biotechnology – including on capital supply, human resources and R&D activities. Therefore, the key goal of our current work is to identify further means to elaborate and implement the target on Science and Technology within economy in order to accomplish eco-efficient bioeconomy.

As part of the bio-based economy, industrial and environmental economy represent another focus and priority of ASSTREIA NGO, which has developed a specialized department composed by: project managers, engineers, architects, financial experts, all with major international expertise and capable to elaborate and manage large-scale projects.

Building competitive bio-industries—new business opportunities, higher potential for value creation through cascading use of biomass and reuse of waste materials, and EU global market leadership.
Thank you for your attention!

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